GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: December 14, 2004, 16:09:49 ; Search time 4 Seconds
(without alignments)
4.004 Million cell updates/sec

Title: US-10-679-532-78
Perfect score: 3230
Sequence: 1 ATCCTAATCAAGACCCCAGT.....AAAACTTCTCTCAAGGATCC 3230

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 112 seqs, 2479 residues

Total number of hits satisfying chosen parameters: 224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 88 summaries

Database : rnpbdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	50	1.5	50	1	US-09-993-346-214	Sequence 214, App
	2	50	1.5	50	1	US-10-131-827-2005	Sequence 2005, Ap
	3	50	1.5	50	1	US-10-131-827-3711	Sequence 3711, Ap
c	4	41.2	1.3	42	1	US-09-755-633-2	Sequence 2, Appli
c	5	41.2	1.3	42	1	US-10-218-654-135	Sequence 135, App
c	6	41.2	1.3	42	1	US-10-262-439-135	Sequence 135, App
c	7	41.2	1.3	42	1	US-10-787-382-2	Sequence 2, Appli
	8	30	0.9	30	1	US-10-450-905-5	Sequence 5, Appli
c	9	29	0.9	29	1	US-09-789-529-82	Sequence 82, Appl
c	10	28	0.9	28	1	US-09-887-145-24	Sequence 24, Appl
c	11	27	0.8	27	1	US-10-450-905-6	Sequence 6, Appli
c	12	25.4	0.8	27	1	US-09-755-633-3	Sequence 3, Appli
c	13	25.4	0.8	27	1	US-10-218-654-136	Sequence 136, App
c	14	25.4	0.8	27	1	US-10-262-439-136	Sequence 136, App
c	15	25.4	0.8	27	1	US-10-787-382-3	Sequence 3, Appli
	16	25	0.8	25	1	US-09-887-145-23	Sequence 23, Appl
	17	24	0.7	24	1	US-10-393-602-14	Sequence 14, Appl
c	18	23	0.7	23	1	US-10-632-534A-10	Sequence 10, Appl
c	19	21	0.7	21	1	US-10-393-602-15	Sequence 15, Appl
	20	21	0.7	21	1	US-10-632-534A-9	Sequence 9, Appli
	21	21	0.7	21	1	US-10-632-534A-23	Sequence 23, Appl
c	22	20	0.6	20	1	US-09-758-881-152	Sequence 152, App
c	23	20	0.6	20	1	US-09-800-629A-39	Sequence 39, Appl
c	24	20	0.6	20	1	US-09-800-629A-40	Sequence 40, Appl
c	25	20	0.6	20	1	US-09-800-629A-41	Sequence 41, Appl
c	26	20	0.6	20	1	US-09-800-629A-42	Sequence 42, Appl
c	27	20	0.6	20	1	US-09-800-629A-43	Sequence 43, Appl
c	28	20	0.6	20	1	US-09-800-629A-44	Sequence 44, Appl
c	29	20	0.6	20	1	US-09-800-629A-45	Sequence 45, Appl
c	30	20	0.6	20	1	US-09-800-629A-46	Sequence 46, Appl
c	31	20	0.6	20	1	US-09-800-629A-47	Sequence 47, Appl
c	32	20	0.6	20	1	US-09-800-629A-48	Sequence 48, Appl
c	33	20	0.6	20	1	US-09-800-629A-49	Sequence 49, Appl
c	34	20	0.6	20	1	US-09-800-629A-50	Sequence 50, Appl
c	35	20	0.6	20	1	US-09-800-629A-51	Sequence 51, Appl
c	36	20	0.6	20	1	US-09-800-629A-52	Sequence 52, Appl
c	37	20	0.6	20	1	US-09-800-629A-53	Sequence 53, Appl
c	38	20	0.6	20	1	US-09-800-629A-54	Sequence 54, Appl
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c	42	20	0.6	20	1	US-09-800-629A-58	Sequence 58, Appl
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c	46	20	0.6	20	1	US-09-800-629A-62	Sequence 62, Appl
c	47	20	0.6	20	1	US-09-800-629A-63	Sequence 63, Appl
c	48	20	0.6	20	1	US-09-800-629A-64	Sequence 64, Appl
c	49	20	0.6	20	1	US-09-800-629A-65	Sequence 65, Appl
c	50	20	0.6	20	1	US-09-800-629A-66	Sequence 66, Appl
c	51	20	0.6	20	1	US-09-800-629A-67	Sequence 67, Appl
c	52	20	0.6	20	1	US-09-800-629A-68	Sequence 68, Appl
c	53	20	0.6	20	1	US-09-800-629A-69	Sequence 69, Appl
c	54	20	0.6	20	1	US-09-800-629A-70	Sequence 70, Appl
c	55	20	0.6	20	1	US-09-800-629A-71	Sequence 71, Appl
c	56	20	0.6	20	1	US-10-679-532-39	Sequence 39, Appl
c	57	20	0.6	20	1	US-10-679-532-40	Sequence 40, Appl
c	58	20	0.6	20	1	US-10-679-532-41	Sequence 41, Appl
c	59	20	0.6	20	1	US-10-679-532-42	Sequence 42, Appl
c	60	20	0.6	20	1	US-10-679-532-43	Sequence 43, Appl
c	61	20	0.6	20	1	US-10-679-532-44	Sequence 44, Appl
c	62	20	0.6	20	1	US-10-679-532-45	Sequence 45, Appl
c	63	20	0.6	20	1	US-10-679-532-46	Sequence 46, Appl
c	64	20	0.6	20	1	US-10-679-532-47	Sequence 47, Appl
c	65	20	0.6	20	1	US-10-679-532-48	Sequence 48, Appl
c	66	20	0.6	20	1	US-10-679-532-49	Sequence 49, Appl
c	67	20	0.6	20	1	US-10-679-532-50	Sequence 50, Appl
c	68	20	0.6	20	1	US-10-679-532-51	Sequence 51, Appl
c	69	20	0.6	20	1	US-10-679-532-52	Sequence 52, Appl
c	70	20	0.6	20	1	US-10-679-532-53	Sequence 53, Appl
c	71	20	0.6	20	1	US-10-679-532-54	Sequence 54, Appl
c	72	20	0.6	20	1	US-10-679-532-55	Sequence 55, Appl
c	73	20	0.6	20	1	US-10-679-532-56	Sequence 56, Appl
c	74	20	0.6	20	1	US-10-679-532-57	Sequence 57, Appl
c	75	20	0.6	20	1	US-10-679-532-58	Sequence 58, Appl
c	76	20	0.6	20	1	US-10-679-532-59	Sequence 59, Appl
c	77	20	0.6	20	1	US-10-679-532-60	Sequence 60, Appl
c	78	20	0.6	20	1	US-10-679-532-61	Sequence 61, Appl
c	79	20	0.6	20	1	US-10-679-532-62	Sequence 62, Appl
c	80	20	0.6	20	1	US-10-679-532-63	Sequence 63, Appl
c	81	20	0.6	20	1	US-10-679-532-64	Sequence 64, Appl
c	82	20	0.6	20	1	US-10-679-532-65	Sequence 65, Appl
c	83	20	0.6	20	1	US-10-679-532-66	Sequence 66, Appl
c	84	20	0.6	20	1	US-10-679-532-67	Sequence 67, Appl
c	85	20	0.6	20	1	US-10-679-532-68	Sequence 68, Appl
c	86	20	0.6	20	1	US-10-679-532-69	Sequence 69, Appl
c	87	20	0.6	20	1	US-10-679-532-70	Sequence 70, Appl
c	88	20	0.6	20	1	US-10-679-532-71	Sequence 71, Appl

ALIGNMENTS

RESULT 1
US-09-993-346-214
; Sequence 214, Application US/09993346
; Publication No. US20030124530A1
; GENERAL INFORMATION:
; APPLICANT: Edwards, Cynthia A.
; Cantor, Charles R.
; Andrews, Beth M.
; Turin, Lisa M.
; Fry, Kirk E.
; TITLE OF INVENTION: Sequence-Directed DNA Binding
; Molecules, Compositions and Methods
; NUMBER OF SEQUENCES: 664

```
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Genelabs Technologies, Inc.
;            STREET: 505 Penobscot Drive
;            CITY: Redwood City
;            STATE: CA
;            COUNTRY: USA
;            ZIP: 94063
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/993,346
;            FILING DATE:. 13-No. US20030124530A1-2001
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 09/354,947
;            FILING DATE: <Unknown>
;            APPLICATION NUMBER: US 08/171,389
;            FILING DATE: 20-DEC-1993
;            APPLICATION NUMBER: US 08/123,936
;            FILING DATE: 17-SEP-1993
;            APPLICATION NUMBER: US 07/996,783
;            FILING DATE: 23-DEC-1992
;            APPLICATION NUMBER: US 07/723,618
;            FILING DATE: 27-JUN-1991
;            APPLICATION NUMBER: US 08/081,070
;            FILING DATE: 22-JUN-1993
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Brady, John F.
;            REGISTRATION NUMBER: 39,118
;            REFERENCE/DOCKET NUMBER: 4600-0175.20/G19P3D1
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: (650) 324-0880
;            TELEFAX: (650) 324-0960
;   INFORMATION FOR SEQ ID NO: 214:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 50 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: double
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA (genomic)
;       HYPOTHETICAL: NO
;       ORIGINAL SOURCE:
;            INDIVIDUAL ISOLATE: Human interleukin 5 (IL-5) gene
;       SEQUENCE DESCRIPTION: SEQ ID NO: 214:
US-09-993-346-214

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
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Db         1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 2
US-10-131-827-2005
; Sequence 2005, Application US/10131827
; Publication No. US20040009479A1
; GENERAL INFORMATION:
;  APPLICANT: Wohlgemuth, Jay
;  APPLICANT:  Fry, Kirk
;  APPLICANT:  Woodward, Robert
;  APPLICANT:  Ly, Ngoc
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
;  TITLE OF INVENTION:  CHRONIC INFLAMMATORY DISEASES
;  FILE REFERENCE: 506612000120
;  CURRENT APPLICATION NUMBER: US/10/131,827
;  CURRENT FILING DATE:  2002-09-06
;  PRIOR APPLICATION NUMBER: US 10/006,290
;  PRIOR FILING DATE: 2001-10-22
;  PRIOR APPLICATION NUMBER: US 60/296,764
;  PRIOR FILING DATE: 2001-06-08
;  NUMBER OF SEQ ID NOS: 9090
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 2005
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-827-2005

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db          1 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 50


RESULT 3
US-10-131-827-3711
; Sequence 3711, Application US/10131827
; Publication No. US20040009479A1
; GENERAL INFORMATION:
;  APPLICANT: Wohlgemuth, Jay
;  APPLICANT:  Fry, Kirk
;  APPLICANT:  Woodward, Robert
;  APPLICANT:  Ly, Ngoc
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR DIAGNOSING AND MONITORING AUTOIMMUNE
;  TITLE OF INVENTION:  CHRONIC INFLAMMATORY DISEASES
;  FILE REFERENCE: 506612000120
;  CURRENT APPLICATION NUMBER: US/10/131,827
;  CURRENT FILING DATE:  2002-09-06
;  PRIOR APPLICATION NUMBER: US 10/006,290
;  PRIOR FILING DATE: 2001-10-22
;  PRIOR APPLICATION NUMBER: US 60/296,764
;  PRIOR FILING DATE: 2001-06-08
;  NUMBER OF SEQ ID NOS: 9090
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 3711
;   LENGTH: 50
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-10-131-827-3711

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.7;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 50


RESULT 4
US-09-755-633-2/c
; Sequence 2, Application US/09755633
; Patent No. US20020127200A1
; GENERAL INFORMATION:
;  APPLICANT:  Yang, Shumin
;  APPLICANT:  McCall, Catherine A.
;  APPLICANT:  Weber, Eric R.
;  TITLE OF INVENTION:  CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
;  TITLE OF INVENTION:  ACID MOLECULES, AND USES THEREOF
;  FILE REFERENCE:  IM-2-C1-C1
;  CURRENT APPLICATION NUMBER: US/09/755,633
;  CURRENT FILING DATE:  2001-01-05
;  PRIOR APPLICATION NUMBER:  09/322,409
;  PRIOR FILING DATE:  1999-05-28
;  PRIOR APPLICATION NUMBER:  60/087,306
;  PRIOR FILING DATE:  1998-05-29
;  NUMBER OF SEQ ID NOS:  21
;  SOFTWARE:  PatentIn Ver. 2.1
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; SEQ ID NO 2
; LENGTH: 42
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-09-755-633-2

Query Match 1.3%; Score 41.2; DB 1; Length 42;
Best Local Similarity 95.2%; Pred. No. 7.5;
Matches 40; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
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Db 42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1

RESULT 5
US-10-218-654-135/c
; Sequence 135, Application US/10218654
; Publication No. US20030099609A1
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
; APPLICANT: Yang, Shumin
; APPLICANT: Dreitz, Matthew J.
; APPLICANT: Wonderling, Ramani S.
; TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
; FILE REFERENCE: IM-2-C1
; CURRENT APPLICATION NUMBER: US/10/218,654
; CURRENT FILING DATE: 2002-08-13
; PRIOR APPLICATION NUMBER: US/09/322,409
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/087,306
; PRIOR FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 154
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 135
; LENGTH: 42
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-10-218-654-135

Query Match 1.3%; Score 41.2; DB 1; Length 42;
Best Local Similarity 95.2%; Pred. No. 7.5;
Matches 40; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
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Db 42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1

RESULT 6
US-10-262-439-135/c
; Sequence 135, Application US/10262439
; Publication No. US20030143196A1
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
; APPLICANT: Yang, Shumin
; APPLICANT: Dreitz, Matthew J.
; APPLICANT: Wonderling, Ramani S.
; TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
; FILE REFERENCE: IM-2-C2
; CURRENT APPLICATION NUMBER: US/10/262,439
; CURRENT FILING DATE: 2002-09-30
; PRIOR APPLICATION NUMBER: US/09/451,527
; PRIOR FILING DATE: 1999-12-01
; PRIOR APPLICATION NUMBER: 09/322,409
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/087,306
; PRIOR FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 135
; LENGTH: 42
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-10-262-439-135

Query Match 1.3%; Score 41.2; DB 1; Length 42;
Best Local Similarity 95.2%; Pred. No. 7.5;
Matches 40; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

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Db 42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1

RESULT 7
US-10-787-382-2/c
; Sequence 2, Application US/10787382
; Publication No. US20040191868A1
; GENERAL INFORMATION:
; APPLICANT: Yang, Shumin
; APPLICANT: McCall, Catherine A.
; APPLICANT: Weber, Eric R.
; TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
; FILE REFERENCE: IM-2-C1-C1
; CURRENT APPLICATION NUMBER: US/10/787,382
; CURRENT FILING DATE: 2004-02-24
; PRIOR APPLICATION NUMBER: US/09/755,633
; PRIOR FILING DATE: 2001-01-05
; PRIOR APPLICATION NUMBER: 09/322,409
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/087,306
; PRIOR FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 42
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-10-787-382-2

Query Match 1.3%; Score 41.2; DB 1; Length 42;
Best Local Similarity 95.2%; Pred. No. 7.5;
Matches 40; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
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Db 42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1

RESULT 8
US-10-450-905-5
; Sequence 5, Application US/10450905
; Publication No. US20040058360A1
; GENERAL INFORMATION:
; APPLICANT: NAKAZATO Hiroshi
; TITLE OF INVENTION: METHOD FOR CONCENTRATION OF GENE
; FILE REFERENCE: 2003-0245/WMC/01736
; CURRENT APPLICATION NUMBER: US/10/450,905
; CURRENT FILING DATE: 2003-06-19
; PRIOR APPLICATION NUMBER: JP 2000-386025

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;  PRIOR FILING DATE: 2000-12-19
;  NUMBER OF SEQ ID NOS: 10
; SEQ ID NO 5
;   LENGTH: 30
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Hf
US-10-450-905-5

  Query Match           0.9%;  Score 30;  DB 1;  Length 30;
  Best Local Similarity  100.0%;  Pred. No. 23;
  Matches  30;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1600 ACTTTTTGAAAATTTTATCTTAATATGTGG 1629
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Db          1 ACTTTTTGAAAATTTTATCTTAATATGTGG 30


RESULT 9
US-09-789-529-82/c
; Sequence 82, Application US/09789529
; Patent No. US20020132290A1
; GENERAL INFORMATION:
;  APPLICANT: Frazer, Kelly A.
;  APPLICANT:  Rubin, Edward M.
;  APPLICANT:  Loots, Gabriela G.
;  APPLICANT:  The Regents of the University of California
;  TITLE OF INVENTION: Coordinate Cytokine Regulatory Sequences
;  FILE REFERENCE: 014939-001300US
;  CURRENT APPLICATION NUMBER: US/09/789,529
;  CURRENT FILING DATE:  2001-09-24
;  PRIOR APPLICATION NUMBER: US 60/183,657
;  PRIOR FILING DATE: 2000-02-18
;  NUMBER OF SEQ ID NOS: 90
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 82
;   LENGTH: 29
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:TaqMan primer
;   OTHER INFORMATION: hIL-5 - reverse
US-09-789-529-82

  Query Match           0.9%;  Score 29;  DB 1;  Length 29;
  Best Local Similarity  100.0%;  Pred. No. 26;
  Matches  29;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1950 GTACTGTGGAAAGACTATTCAAAAACTTG 1978
             |||||||||||||||||||||||||||||
Db         29 GTACTGTGGAAAGACTATTCAAAAACTTG 1


RESULT 10
US-09-887-145-24/c
; Sequence 24, Application US/09887145
; Publication No. US20030082139A1
;   GENERAL INFORMATION:
;        APPLICANT: Kim, Seung U
;        TITLE OF INVENTION: Immortalized human microglia
;                            cell and continuous cell line
;        NUMBER OF SEQUENCES: 54
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: David Prashker, Esq.
;             STREET: P.O. Box 5387
;             CITY: Magnolia
;             STATE: Massachusetts
;             COUNTRY: USA
;             ZIP: 01930
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage
;             COMPUTER: Dell PC
;             OPERATING SYSTEM: MS DOS
;             SOFTWARE: Microsoft Word version 97
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/887,145
;             FILING DATE: 22-Jun-2001
;             CLASSIFICATION: Unknown
;        ATTORNEY/AGENT INFORMATION:
;             NAME: David Prashker, Esq.
;             REGISTRATION NUMBER: 29,693
;             REFERENCE/DOCKET NUMBER: UBC-002
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (978) 525-3794
;   INFORMATION FOR SEQ ID NO: 24:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 28 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        SEQUENCE DESCRIPTION: SEQ ID NO: 24:
US-09-887-145-24

  Query Match           0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity  100.0%;  Pred. No. 28;
  Matches  28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1975 CTTGTCCTTAATAAAGAAATACATTGAC 2002
             ||||||||||||||||||||||||||||
Db         28 CTTGTCCTTAATAAAGAAATACATTGAC 1


RESULT 11
US-10-450-905-6/c
; Sequence 6, Application US/10450905
; Publication No. US20040058360A1
; GENERAL INFORMATION:
;  APPLICANT: NAKAZATO Hiroshi
;  TITLE OF INVENTION: METHOD FOR CONCENTRATION OF GENE
;  FILE REFERENCE: 2003-0245/WMC/01736
;  CURRENT APPLICATION NUMBER: US/10/450,905
;  CURRENT FILING DATE:  2003-06-19
;  PRIOR APPLICATION NUMBER: JP 2000-386025
;  PRIOR FILING DATE: 2000-12-19
;  NUMBER OF SEQ ID NOS: 10
; SEQ ID NO 6
;   LENGTH: 27
;   TYPE: DNA
;   ORGANISM: Artificial sequence
;   FEATURE:
;   OTHER INFORMATION: Hr
US-10-450-905-6

  Query Match           0.8%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity  100.0%;  Pred. No. 31;
  Matches  27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1981 CTTAATAAAGAAATACATTGACGGCCA 2007
             ||||||||||||||||||||||||||||
Db         27 CTTAATAAAGAAATACATTGACGGCCA 1


RESULT 12
US-09-755-633-3/c
; Sequence 3, Application US/09755633
; Patent No. US20020127200A1
; GENERAL INFORMATION:
;  APPLICANT:  Yang, Shumin
;  APPLICANT:  McCall, Catherine A.
;  APPLICANT:  Weber, Eric R.
;  TITLE OF INVENTION:  CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
;  TITLE OF INVENTION:  ACID MOLECULES, AND USES THEREOF
;  FILE REFERENCE:  IM-2-C1-C1
;  CURRENT APPLICATION NUMBER: US/09/755,633
```

; CURRENT FILING DATE: 2001-01-05
; PRIOR APPLICATION NUMBER: 09/322,409
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/087,306
; PRIOR FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 27
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-09-755-633-3

Query Match 0.8%; Score 25.4; DB 1; Length 27;
Best Local Similarity 85.2%; Pred. No. 38;
Matches 23; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
||||||||||:||||::|||:|||||
Db 27 TGAGAATGAGGSCCAASMAAGRGTCAG 1

RESULT 13
US-10-218-654-136/c
; Sequence 136, Application US/10218654
; Publication No. US20030099609A1
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
; APPLICANT: Yang, Shumin
; APPLICANT: Dreitz, Matthew J.
; APPLICANT: Wonderling, Ramani S.
; TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
; FILE REFERENCE: IM-2-C1
; CURRENT APPLICATION NUMBER: US/10/218,654
; CURRENT FILING DATE: 2002-08-13
; PRIOR APPLICATION NUMBER: US/09/322,409
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/087,306
; PRIOR FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 154
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 136
; LENGTH: 27
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-10-218-654-136

Query Match 0.8%; Score 25.4; DB 1; Length 27;
Best Local Similarity 85.2%; Pred. No. 38;
Matches 23; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
||||||||||:||||::|||:|||||
Db 27 TGAGAATGAGGSCCAASMAAGRGTCAG 1

RESULT 14
US-10-262-439-136/c
; Sequence 136, Application US/10262439
; Publication No. US20030143196A1
; GENERAL INFORMATION:
; APPLICANT: Sim, Gek-Kee
; APPLICANT: Yang, Shumin
; APPLICANT: Dreitz, Matthew J.
; APPLICANT: Wonderling, Ramani S.
; TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
; FILE REFERENCE: IM-2-C2
; CURRENT APPLICATION NUMBER: US/10/262,439
; CURRENT FILING DATE: 2002-09-30
; PRIOR APPLICATION NUMBER: US/09/451,527
; PRIOR FILING DATE: 1999-12-01
; PRIOR APPLICATION NUMBER: 09/322,409
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/087,306
; PRIOR FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 136
; LENGTH: 27
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-10-262-439-136

Query Match 0.8%; Score 25.4; DB 1; Length 27;
Best Local Similarity 85.2%; Pred. No. 38;
Matches 23; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
||||||||||:||||::|||:|||||
Db 27 TGAGAATGAGGSCCAASMAAGRGTCAG 1

RESULT 15
US-10-787-382-3/c
; Sequence 3, Application US/10787382
; Publication No. US20040191868A1
; GENERAL INFORMATION:
; APPLICANT: Yang, Shumin
; APPLICANT: McCall, Catherine A.
; APPLICANT: Weber, Eric R.
; TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
; TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
; FILE REFERENCE: IM-2-C1-C1
; CURRENT APPLICATION NUMBER: US/10/787,382
; CURRENT FILING DATE: 2004-02-24
; PRIOR APPLICATION NUMBER: US/09/755,633
; PRIOR FILING DATE: 2001-01-05
; PRIOR APPLICATION NUMBER: 09/322,409
; PRIOR FILING DATE: 1999-05-28
; PRIOR APPLICATION NUMBER: 60/087,306
; PRIOR FILING DATE: 1998-05-29
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 3
; LENGTH: 27
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Synthetic
; OTHER INFORMATION: Primer
US-10-787-382-3

Query Match 0.8%; Score 25.4; DB 1; Length 27;
Best Local Similarity 85.2%; Pred. No. 38;
Matches 23; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
||||||||||:||||::|||:|||||
Db 27 TGAGAATGAGGSCCAASMAAGRGTCAG 1

RESULT 16
US-09-887-145-23
; Sequence 23, Application US/09887145
; Publication No. US20030082139A1

```
;   GENERAL INFORMATION:
;        APPLICANT: Kim, Seung U
;        TITLE OF INVENTION: Immortalized human microglia
;                            cell and continuous cell line
;        NUMBER OF SEQUENCES: 54
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: David Prashker, Esq.
;             STREET: P.O. Box 5387
;             CITY: Magnolia
;             STATE: Massachusetts
;             COUNTRY: USA
;             ZIP: 01930
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage
;             COMPUTER: Dell PC
;             OPERATING SYSTEM: MS DOS
;             SOFTWARE: Microsoft Word version 97
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/887,145
;             FILING DATE: 22-Jun-2001
;             CLASSIFICATION: Unknown
;        ATTORNEY/AGENT INFORMATION:
;             NAME: David Prashker, Esq.
;             REGISTRATION NUMBER: 29,693
;             REFERENCE/DOCKET NUMBER: UBC-002
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (978) 525-3794
;   INFORMATION FOR SEQ ID NO: 23:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 25 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: peptide
;        SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-887-145-23

  Query Match             0.8%;  Score 25;  DB 1;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        555 GAGGATGCTTCTGCATTTGAGTTTG 579
              |||||||||||||||||||||||||
Db          1 GAGGATGCTTCTGCATTTGAGTTTG 25


RESULT 17
US-10-393-602-14
; Sequence 14, Application US/10393602
; Publication No. US20030170714A1
;   GENERAL INFORMATION:
;        APPLICANT: Gregory Dolganov
;        TITLE OF INVENTION: Transcripts Encoding Immunomodulatory
;                            Polypeptides
;        NUMBER OF SEQUENCES: 151
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Dehlinger & Associates
;             STREET: 350 Cambridge Avenue, Suite 250
;             CITY: Palo Alto
;             STATE: CA
;             COUNTRY: USA
;             ZIP: 94306
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Floppy disk
;             COMPUTER: IBM PC compatible
;             OPERATING SYSTEM: PC-DOS/MS-DOS
;             SOFTWARE: PatentIn Release #1.0, Version #1.25
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/10/393,602
;             FILING DATE: 19-Mar-2003
;             CLASSIFICATION: 435
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/08/592,126
;             FILING DATE: 26-JAN-1996
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Sholtz, Charles K.
;             REGISTRATION NUMBER: 38,615
;             REFERENCE/DOCKET NUMBER: 4600-0111
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: (415) 324-0880
;             TELEFAX: (415) 324-0960
;   INFORMATION FOR SEQ ID NO: 14:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 24 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: DNA
;        HYPOTHETICAL: NO
;        ANTI-SENSE: NO
;        ORIGINAL SOURCE:
;             INDIVIDUAL ISOLATE: Primer IL5-1
;        SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-10-393-602-14

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 41;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
              ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 18
US-10-632-534A-10/c
; Sequence 10, Application US/10632534A
; Publication No. US20040058373A1
; GENERAL INFORMATION:
;  APPLICANT: WINKLER, MATTHEW M.
;  APPLICANT:  BROWN, DAVID
;  TITLE OF INVENTION: COMPETITIVE AMPLIFICATION OF FRACTIONATED TARGETS FROM
;  TITLE OF INVENTION:  MULTIPLE NUCLEIC ACID SAMPLES
;  FILE REFERENCE: AMBI:065US
;  CURRENT APPLICATION NUMBER: US/10/632,534A
;  CURRENT FILING DATE:  2003-07-31
;  PRIOR APPLICATION NUMBER: PCT/US02/03169
;  PRIOR FILING DATE: 2002-01-31
;  PRIOR APPLICATION NUMBER: 60/265,692
;  PRIOR FILING DATE: 2001-01-31
;  NUMBER OF SEQ ID NOS: 24
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
;  LENGTH: 23
;  TYPE: DNA
;  ORGANISM: Artificial Sequence
;  FEATURE:
;  OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;  OTHER INFORMATION: Primer
US-10-632-534A-10

  Query Match             0.7%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 44;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2249 GGAGGAGAAGGACATTTTACTGC 2271
              |||||||||||||||||||||||
Db         23 GGAGGAGAAGGACATTTTACTGC 1


RESULT 19
US-10-393-602-15/c
; Sequence 15, Application US/10393602
; Publication No. US20030170714A1
;   GENERAL INFORMATION:
;        APPLICANT: Gregory Dolganov
```

```
;       TITLE OF INVENTION: Transcripts Encoding Immunomodulatory
;                           Polypeptides
;       NUMBER OF SEQUENCES: 151
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Dehlinger & Associates
;            STREET: 350 Cambridge Avenue, Suite 250
;            CITY: Palo Alto
;            STATE: CA
;            COUNTRY: USA
;            ZIP: 94306
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Floppy disk
;            COMPUTER: IBM PC compatible
;            OPERATING SYSTEM: PC-DOS/MS-DOS
;            SOFTWARE: PatentIn Release #1.0, Version #1.25
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/10/393,602
;            FILING DATE: 19-Mar-2003
;            CLASSIFICATION: 435
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/08/592,126
;            FILING DATE: 26-JAN-1996
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Sholtz, Charles K.
;            REGISTRATION NUMBER: 38,615
;            REFERENCE/DOCKET NUMBER: 4600-0111
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: (415) 324-0880
;            TELEFAX: (415) 324-0960
;   INFORMATION FOR SEQ ID NO: 15:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 21 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA
;       HYPOTHETICAL: NO
;       ANTI-SENSE: NO
;       ORIGINAL SOURCE:
;            INDIVIDUAL ISOLATE: Primer IL4-2
;       SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-10-393-602-15

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
             |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 20
US-10-632-534A-9
; Sequence 9, Application US/10632534A
; Publication No. US20040058373A1
; GENERAL INFORMATION:
;  APPLICANT: WINKLER, MATTHEW M.
;  APPLICANT:  BROWN, DAVID
;  TITLE OF INVENTION: COMPETITIVE AMPLIFICATION OF FRACTIONATED TARGETS FROM
;  TITLE OF INVENTION:  MULTIPLE NUCLEIC ACID SAMPLES
;  FILE REFERENCE: AMBI:065US
;  CURRENT APPLICATION NUMBER: US/10/632,534A
;  CURRENT FILING DATE:  2003-07-31
;  PRIOR APPLICATION NUMBER: PCT/US02/03169
;  PRIOR FILING DATE: 2002-01-31
;  PRIOR APPLICATION NUMBER: 60/265,692
;  PRIOR FILING DATE: 2001-01-31
;  NUMBER OF SEQ ID NOS: 24
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-10-632-534A-9

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 21
US-10-632-534A-23
; Sequence 23, Application US/10632534A
; Publication No. US20040058373A1
; GENERAL INFORMATION:
;  APPLICANT: WINKLER, MATTHEW M.
;  APPLICANT:  BROWN, DAVID
;  TITLE OF INVENTION: COMPETITIVE AMPLIFICATION OF FRACTIONATED TARGETS FROM
;  TITLE OF INVENTION:  MULTIPLE NUCLEIC ACID SAMPLES
;  FILE REFERENCE: AMBI:065US
;  CURRENT APPLICATION NUMBER: US/10/632,534A
;  CURRENT FILING DATE:  2003-07-31
;  PRIOR APPLICATION NUMBER: PCT/US02/03169
;  PRIOR FILING DATE: 2002-01-31
;  PRIOR APPLICATION NUMBER: 60/265,692
;  PRIOR FILING DATE: 2001-01-31
;  NUMBER OF SEQ ID NOS: 24
;  SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 23
;   LENGTH: 21
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-10-632-534A-23

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 52;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 22
US-09-758-881-152/c
; Sequence 152, Application US/09758881
; Patent No. US20010029250A1
; GENERAL INFORMATION:
;  APPLICANT:  Karras, James G
;  TITLE OF INVENTION:  Antisense Oligonucleotide Modulation of STAT3
;  TITLE OF INVENTION:  Expression
;  FILE REFERENCE:  ISPH-0532
;  CURRENT APPLICATION NUMBER: US/09/758,881
;  CURRENT FILING DATE:  2001-01-11
;  PRIOR APPLICATION NUMBER:  PCT/US00/09054
;  PRIOR FILING DATE:  2000-04-06
;  PRIOR APPLICATION NUMBER:  09/288,461
;  PRIOR FILING DATE:  1999-04-08
;  NUMBER OF SEQ ID NOS:  152
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 152
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
```

```
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-758-881-152

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
             ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 23
US-09-800-629A-39/c
; Sequence 39, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 39
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-39

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 24
US-09-800-629A-40/c
; Sequence 40, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-40

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 25
US-09-800-629A-41/c
; Sequence 41, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 41
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-41

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        540 ACGTTTCAGAGCCATGAGGA 559
              ||||||||||||||||||||
Db         20 ACGTTTCAGAGCCATGAGGA 1


RESULT 26
US-09-800-629A-42/c
; Sequence 42, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 42
;   LENGTH: 20
;   TYPE: DNA
```

; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-42

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 688 GCCAATGAGGTAATTTTCTT 707
||||||||||||||||||||
Db 20 GCCAATGAGGTAATTTTCTT 1

RESULT 27
US-09-800-629A-43/c
; Sequence 43, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-43

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 857 TGAATGCTGGTGTGCTGTAA 876
||||||||||||||||||||
Db 20 TGAATGCTGGTGTGCTGTAA 1

RESULT 28
US-09-800-629A-44/c
; Sequence 44, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-44

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 895 TCCTCTCCAGACTCTGAGGA 914
||||||||||||||||||||
Db 20 TCCTCTCCAGACTCTGAGGA 1

RESULT 29
US-09-800-629A-45/c
; Sequence 45, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-45

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 905 ACTCTGAGGATTCCTGTTCC 924
||||||||||||||||||||
Db 20 ACTCTGAGGATTCCTGTTCC 1

RESULT 30
US-09-800-629A-46/c
; Sequence 46, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 46

```
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-46

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 31
US-09-800-629A-47/c
; Sequence 47, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 47
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-47

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        964 TGATGGCATGAATAAGTAAA 983
              ||||||||||||||||||||
Db         20 TGATGGCATGAATAAGTAAA 1


RESULT 32
US-09-800-629A-48/c
; Sequence 48, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 48
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-48

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1161 TTCCCAAAGAGCATCGTGTC 1180
              ||||||||||||||||||||
Db         20 TTCCCAAAGAGCATCGTGTC 1


RESULT 33
US-09-800-629A-49/c
; Sequence 49, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 49
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-49

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1407 TGCCTGGTCATATTAAAATG 1426
              ||||||||||||||||||||
Db         20 TGCCTGGTCATATTAAAATG 1


RESULT 34
US-09-800-629A-50/c
; Sequence 50, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
```

```
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 50
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-50

  Query Match           0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1627 TGGTGGTTTGTTGCCTAGAA 1646
             ||||||||||||||||||||
Db         20 TGGTGGTTTGTTGCCTAGAA 1


RESULT 35
US-09-800-629A-51/c
; Sequence 51, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 51
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-51

  Query Match           0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
             ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 36
US-09-800-629A-52/c
; Sequence 52, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 52
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-52

  Query Match           0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1884 ACCAACTGTGCACTGAAGAA 1903
             ||||||||||||||||||||
Db         20 ACCAACTGTGCACTGAAGAA 1


RESULT 37
US-09-800-629A-53/c
; Sequence 53, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 53
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-53

  Query Match           0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1932 GTCAAACTGTGCAAGGGGGT 1951
             ||||||||||||||||||||
Db         20 GTCAAACTGTGCAAGGGGGT 1


RESULT 38
US-09-800-629A-54/c
; Sequence 54, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
```

```
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 54
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-54

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1988 AAGAAATACATTGACGGCCA 2007
             ||||||||||||||||||||
Db         20 AAGAAATACATTGACGGCCA 1


RESULT 39
US-09-800-629A-55/c
; Sequence 55, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 55
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-55

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
             ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 40
US-09-800-629A-56/c
; Sequence 56, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 56
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-56

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2051 GCTGTGCCTATTTCTATGGA 2070
             ||||||||||||||||||||
Db         20 GCTGTGCCTATTTCTATGGA 1


RESULT 41
US-09-800-629A-57/c
; Sequence 57, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 57
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-57

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
             ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 42
US-09-800-629A-58/c
; Sequence 58, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
```

```
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 58
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-58

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2135 AAGACGGAGAGTAAACCAAT 2154
             ||||||||||||||||||||
Db         20 AAGACGGAGAGTAAACCAAT 1


RESULT 43
US-09-800-629A-59/c
; Sequence 59, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 59
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-59

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2186 AATGAACACCGAGTGGATAA 2205
             ||||||||||||||||||||
Db         20 AATGAACACCGAGTGGATAA 1


RESULT 44
US-09-800-629A-60/c
; Sequence 60, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;, CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 60
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-60

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2241 AAGATTTTGGAGGAGAAGGA 2260
             ||||||||||||||||||||
Db         20 AAGATTTTGGAGGAGAAGGA 1


RESULT 45
US-09-800-629A-61/c
; Sequence 61, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 61
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-61

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
             ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 46
US-09-800-629A-62/c
; Sequence 62, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
```

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;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 62
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-62

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
             ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 47
US-09-800-629A-63/c
; Sequence 63, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 63
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-63

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
             ||||||||||||||||||||
Db         20 AAGTATTTTCCTCCAGGCAA 1


RESULT 48
US-09-800-629A-64/c
; Sequence 64, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 64
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-64

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 49
US-09-800-629A-65/c
; Sequence 65, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 65
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-65

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 50
US-09-800-629A-66/c
; Sequence 66, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
```

; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 66
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-66

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 688 GCCAATGAGGTAATTTTCTT 707
||||||||||||||||||||
Db 20 GCCAATGAGGTAATTTTCTT 1

RESULT 51
US-09-800-629A-67/c
; Sequence 67, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 67
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-67

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 895 TCCTCTCCAGACTCTGAGGA 914
||||||||||||||||||||
Db 20 TCCTCTCCAGACTCTGAGGA 1

RESULT 52
US-09-800-629A-68/c
; Sequence 68, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 68
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-68

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 928 ACATAAAAATGTAAGTTAAA 947
||||||||||||||||||||
Db 20 ACATAAAAATGTAAGTTAAA 1

RESULT 53
US-09-800-629A-69/c
; Sequence 69, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/09/800,629A
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 69
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-69

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1873 CCTCATTTAGCACCAACTGT 1892
||||||||||||||||||||
Db 20 CCTCATTTAGCACCAACTGT 1

RESULT 54
US-09-800-629A-70/c
; Sequence 70, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah

```
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 70
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-70

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
             ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 55
US-09-800-629A-71/c
; Sequence 71, Application US/09800629A
; Patent No. US20020128216A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/09/800,629A
;  CURRENT FILING DATE:  2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 71
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-800-629A-71

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
             ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 56
US-10-679-532-39/c
; Sequence 39, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 39
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-39

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 57
US-10-679-532-40/c
; Sequence 40, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-40

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 58
US-10-679-532-41/c
; Sequence 41, Application US/10679532
```

; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 41
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-41

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 540 ACGTTTCAGAGCCATGAGGA 559
||||||||||||||||||||
Db 20 ACGTTTCAGAGCCATGAGGA 1

RESULT 59
US-10-679-532-42/c
; Sequence 42, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-42

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 688 GCCAATGAGGTAATTTTCTT 707
||||||||||||||||||||
Db 20 GCCAATGAGGTAATTTTCTT 1

RESULT 60
US-10-679-532-43/c
; Sequence 43, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-43

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 857 TGAATGCTGGTGTGCTGTAA 876
||||||||||||||||||||
Db 20 TGAATGCTGGTGTGCTGTAA 1

RESULT 61
US-10-679-532-44/c
; Sequence 44, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-44

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1
```

RESULT 62
US-10-679-532-45/c
; Sequence 45, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 45
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-45

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        905 ACTCTGAGGATTCCTGTTCC 924
              ||||||||||||||||||||
Db         20 ACTCTGAGGATTCCTGTTCC 1
```

RESULT 63
US-10-679-532-46/c
; Sequence 46, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 46
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-46

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1
```

RESULT 64
US-10-679-532-47/c
; Sequence 47, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 47
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-47

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        964 TGATGGCATGAATAAGTAAA 983
              ||||||||||||||||||||
Db         20 TGATGGCATGAATAAGTAAA 1
```

RESULT 65
US-10-679-532-48/c
; Sequence 48, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 48
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-48

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1161 TTCCCAAAGAGCATCGTGTC 1180
||||||||||||||||||||
Db 20 TTCCCAAAGAGCATCGTGTC 1

RESULT 66
US-10-679-532-49/c
; Sequence 49, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 49
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-49

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1407 TGCCTGGTCATATTAAAATG 1426
||||||||||||||||||||
Db 20 TGCCTGGTCATATTAAAATG 1

RESULT 67
US-10-679-532-50/c
; Sequence 50, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 50
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-50

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1627 TGGTGGTTTGTTGCCTAGAA 1646
||||||||||||||||||||
Db 20 TGGTGGTTTGTTGCCTAGAA 1

RESULT 68
US-10-679-532-51/c
; Sequence 51, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 51
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-51

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1873 CCTCATTTAGCACCAACTGT 1892
||||||||||||||||||||
Db 20 CCTCATTTAGCACCAACTGT 1

RESULT 69
US-10-679-532-52/c
; Sequence 52, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537

; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 52
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-52

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1884 ACCAACTGTGCACTGAAGAA 1903
||||||||||||||||||||
Db 20 ACCAACTGTGCACTGAAGAA 1

RESULT 70
US-10-679-532-53/c
; Sequence 53, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 53
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-53

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1932 GTCAAACTGTGCAAGGGGGT 1951
||||||||||||||||||||
Db 20 GTCAAACTGTGCAAGGGGGT 1

RESULT 71
US-10-679-532-54/c
; Sequence 54, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 54
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-54

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1988 AAGAAATACATTGACGGCCA 2007
||||||||||||||||||||
Db 20 AAGAAATACATTGACGGCCA 1

RESULT 72
US-10-679-532-55/c
; Sequence 55, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 55
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-55

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2002 CGGCCAAAAAGTAAGTTACA 2021
||||||||||||||||||||
Db 20 CGGCCAAAAAGTAAGTTACA 1

RESULT 73
US-10-679-532-56/c

; Sequence 56, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 56
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-56

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2051 GCTGTGCCTATTTCTATGGA 2070
||||||||||||||||||||
Db 20 GCTGTGCCTATTTCTATGGA 1

RESULT 74
US-10-679-532-57/c
; Sequence 57, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 57
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-57

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2108 TTTTTCACAGAAAAAGTGTG 2127
||||||||||||||||||||

Db 20 TTTTTCACAGAAAAAGTGTG 1

RESULT 75
US-10-679-532-58/c
; Sequence 58, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 58
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-58

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2135 AAGACGGAGAGTAAACCAAT 2154
||||||||||||||||||||
Db 20 AAGACGGAGAGTAAACCAAT 1

RESULT 76
US-10-679-532-59/c
; Sequence 59, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 59
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-59

Query Match 0.6%; Score 20; DB 1; Length 20;

```
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2186 AATGAACACCGAGTGGATAA 2205
              ||||||||||||||||||||
Db         20 AATGAACACCGAGTGGATAA 1


RESULT 77
US-10-679-532-60/c
; Sequence 60, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 60
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-60

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2241 AAGATTTTGGAGGAGAAGGA 2260
              ||||||||||||||||||||
Db         20 AAGATTTTGGAGGAGAAGGA 1


RESULT 78
US-10-679-532-61/c
; Sequence 61, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 61
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-61

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
              ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 79
US-10-679-532-62/c
; Sequence 62, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 62
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-62

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
              ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 80
US-10-679-532-63/c
; Sequence 63, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
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;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 63
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-63

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
              ||||||||||||||||||||
Db         20 AAGTATTTTCCTCCAGGCAA 1


RESULT 81
US-10-679-532-64/c
; Sequence 64, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 64
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-64

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 82
US-10-679-532-65/c
; Sequence 65, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 65
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-65

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 83
US-10-679-532-66/c
; Sequence 66, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 66
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-66

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 84
US-10-679-532-67/c
; Sequence 67, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
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;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 67
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-67

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 85
US-10-679-532-68/c
; Sequence 68, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 68
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-68

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 86
US-10-679-532-69/c
; Sequence 69, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 69
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-69

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 87
US-10-679-532-70/c
; Sequence 70, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT:  Karras, James G
;  APPLICANT:  McKay, Robert
;  APPLICANT:  Manoharan, Muthiah
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION:  TRANSDUCTION
;  FILE REFERENCE: ISPH-0537
;  CURRENT APPLICATION NUMBER: US/10/679,532
;  CURRENT FILING DATE:  2003-10-06
;  PRIOR APPLICATION NUMBER: US/09/800,629A
;  PRIOR FILING DATE: 2001-03-07
;  PRIOR APPLICATION NUMBER: PCT/US00/07318
;  PRIOR FILING DATE: 2000-03-17
;  PRIOR APPLICATION NUMBER: 09/280,799
;  PRIOR FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 210
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 70
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-70

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
              ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 88
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US-10-679-532-71/c
; Sequence 71, Application US/10679532
; Publication No. US20040121376A1
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; APPLICANT: Manoharan, Muthiah
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0537
; CURRENT APPLICATION NUMBER: US/10/679,532
; CURRENT FILING DATE: 2003-10-06
; PRIOR APPLICATION NUMBER: US/09/800,629A
; PRIOR FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: PCT/US00/07318
; PRIOR FILING DATE: 2000-03-17
; PRIOR APPLICATION NUMBER: 09/280,799
; PRIOR FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 210
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 71
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-10-679-532-71

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1
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Search completed: December 14, 2004, 16:09:53
Job time : 4 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: December 14, 2004, 16:07:41 ; Search time 3 Seconds
(without alignments)
5.321 Million cell updates/sec

Title: US-10-679-532-78
Perfect score: 3230
Sequence: 1 ATCCTAATCAAGACCCCAGT.....AAAACTTCTCTCAAGGATCC 3230

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 101 seqs, 2471 residues

Total number of hits satisfying chosen parameters: 202

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 103 summaries

Database : rnidb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	50	1.5	50	1	US-08-171-389-214	Sequence 214, App
	2	50	1.5	50	1	US-08-123-936-214	Sequence 214, App
	3	50	1.5	50	1	US-08-475-228A-214	Sequence 214, App
	4	50	1.5	50	1	US-08-482-080A-214	Sequence 214, App
	5	50	1.5	50	1	US-09-354-947-214	Sequence 214, App
	6	50	1.5	50	1	PCT-US93-12388-214	Sequence 214, App
c	7	45.4	1.4	47	1	US-08-466-852-2	Sequence 2, Appli
	8	43	1.3	43	1	US-08-466-852-3	Sequence 3, Appli
c	9	41.2	1.3	42	1	US-09-322-409-135	Sequence 135, App
c	10	41.2	1.3	42	1	US-09-451-527-135	Sequence 135, App
	11	34	1.1	34	1	US-08-434-503-48	Sequence 48, Appl
c	12	33.4	1.0	35	1	US-08-466-852-4	Sequence 4, Appli
	13	33.4	1.0	39	1	US-08-466-852-1	Sequence 1, Appli
	14	33	1.0	33	1	US-08-434-503-51	Sequence 51, Appl
c	15	33	1.0	33	1	US-08-721-260-10	Sequence 10, Appl
	16	29	0.9	29	1	US-08-434-503-53	Sequence 53, Appl
c	17	29	0.9	29	1	PCT-US94-10957-16	Sequence 16, Appl
c	18	28	0.9	28	1	US-08-859-998-56	Sequence 56, Appl
c	19	28	0.9	28	1	US-09-225-928-56	Sequence 56, Appl
c	20	28	0.9	28	1	US-09-225-201B-56	Sequence 56, Appl
	21	28	0.9	28	1	US-09-371-615A-5	Sequence 5, Appli
c	22	28	0.9	28	1	US-09-887-145-24	Sequence 24, Appl
	23	27	0.8	27	1	US-08-434-503-41	Sequence 41, Appl
	24	26	0.8	26	1	US-08-859-998-55	Sequence 55, Appl
	25	26	0.8	26	1	US-09-225-928-55	Sequence 55, Appl
	26	26	0.8	26	1	US-09-225-201B-55	Sequence 55, Appl
c	27	25.4	0.8	27	1	US-09-322-409-136	Sequence 136, App
c	28	25.4	0.8	27	1	US-09-451-527-136	Sequence 136, App
	29	25	0.8	25	1	US-09-887-145-23	Sequence 23, Appl
	30	24	0.7	24	1	US-08-592-126-14	Sequence 14, Appl
	31	24	0.7	24	1	US-08-687-080-14	Sequence 14, Appl
	32	24	0.7	24	1	US-09-168-595-14	Sequence 14, Appl
	33	23	0.7	23	1	US-08-434-503-47	Sequence 47, Appl
	34	22.4	0.7	27	1	US-09-617-548-13	Sequence 13, Appl
	35	22	0.7	22	1	US-08-434-503-40	Sequence 40, Appl
	36	22	0.7	22	1	US-08-434-503-44	Sequence 44, Appl
	37	22	0.7	22	1	US-08-721-260-9	Sequence 9, Appli
c	38	21	0.7	21	1	US-08-592-126-15	Sequence 15, Appl
c	39	21	0.7	21	1	US-08-687-080-15	Sequence 15, Appl
	40	21	0.7	21	1	US-08-621-841-11	Sequence 11, Appl
c	41	21	0.7	21	1	US-09-168-595-15	Sequence 15, Appl
	42	21	0.7	21	1	PCT-US94-10957-15	Sequence 15, Appl
c	43	20	0.6	20	1	US-09-280-799-39	Sequence 39, Appl
c	44	20	0.6	20	1	US-09-280-799-40	Sequence 40, Appl
c	45	20	0.6	20	1	US-09-280-799-41	Sequence 41, Appl
c	46	20	0.6	20	1	US-09-280-799-42	Sequence 42, Appl
c	47	20	0.6	20	1	US-09-280-799-43	Sequence 43, Appl
c	48	20	0.6	20	1	US-09-280-799-44	Sequence 44, Appl
c	49	20	0.6	20	1	US-09-280-799-45	Sequence 45, Appl
c	50	20	0.6	20	1	US-09-280-799-46	Sequence 46, Appl
c	51	20	0.6	20	1	US-09-280-799-47	Sequence 47, Appl
c	52	20	0.6	20	1	US-09-280-799-48	Sequence 48, Appl
c	53	20	0.6	20	1	US-09-280-799-49	Sequence 49, Appl
c	54	20	0.6	20	1	US-09-280-799-50	Sequence 50, Appl
c	55	20	0.6	20	1	US-09-280-799-51	Sequence 51, Appl
c	56	20	0.6	20	1	US-09-280-799-52	Sequence 52, Appl
c	57	20	0.6	20	1	US-09-280-799-53	Sequence 53, Appl
c	58	20	0.6	20	1	US-09-280-799-54	Sequence 54, Appl
c	59	20	0.6	20	1	US-09-280-799-55	Sequence 55, Appl
c	60	20	0.6	20	1	US-09-280-799-56	Sequence 56, Appl
c	61	20	0.6	20	1	US-09-280-799-57	Sequence 57, Appl
c	62	20	0.6	20	1	US-09-280-799-58	Sequence 58, Appl
c	63	20	0.6	20	1	US-09-280-799-59	Sequence 59, Appl
c	64	20	0.6	20	1	US-09-280-799-60	Sequence 60, Appl
c	65	20	0.6	20	1	US-09-280-799-61	Sequence 61, Appl
c	66	20	0.6	20	1	US-09-280-799-62	Sequence 62, Appl
c	67	20	0.6	20	1	US-09-280-799-63	Sequence 63, Appl
c	68	20	0.6	20	1	US-09-280-799-64	Sequence 64, Appl
c	69	20	0.6	20	1	US-09-280-799-65	Sequence 65, Appl
c	70	20	0.6	20	1	US-09-280-799-66	Sequence 66, Appl
c	71	20	0.6	20	1	US-09-280-799-67	Sequence 67, Appl
c	72	20	0.6	20	1	US-09-280-799-68	Sequence 68, Appl
c	73	20	0.6	20	1	US-09-280-799-69	Sequence 69, Appl
c	74	20	0.6	20	1	US-09-280-799-70	Sequence 70, Appl
c	75	20	0.6	20	1	US-09-280-799-71	Sequence 71, Appl
c	76	20	0.6	20	1	US-09-758-881-152	Sequence 152, App
c	77	18.8	0.6	22	1	US-09-371-615A-4	Sequence 4, Appli
c	78	18.4	0.6	20	1	US-09-280-799-15	Sequence 15, Appl
c	79	18.4	0.6	20	1	US-09-280-799-72	Sequence 72, Appl
c	80	18.4	0.6	20	1	US-09-280-799-75	Sequence 75, Appl
	81	18.4	0.6	20	1	US-09-371-615A-3	Sequence 3, Appli
	82	18	0.6	18	1	US-08-319-492B-703	Sequence 703, App
	83	18	0.6	18	1	US-08-319-492B-705	Sequence 705, App
	84	18	0.6	18	1	US-08-319-492B-707	Sequence 707, App
	85	18	0.6	18	1	US-08-319-492B-709	Sequence 709, App
	86	18	0.6	18	1	US-08-434-503-42	Sequence 42, Appl
	87	18	0.6	18	1	US-08-434-503-54	Sequence 54, Appl
c	88	17.8	0.6	33	1	US-08-434-503-51	Sequence 51, Appl
	89	17.4	0.5	19	1	US-08-420-244-4	Sequence 4, Appli
	90	17.4	0.5	20	1	US-09-259-411-5	Sequence 5, Appli
	91	17	0.5	17	1	US-08-434-503-39	Sequence 39, Appl
c	92	16.8	0.5	20	1	US-09-280-799-16	Sequence 16, Appl
c	93	16.4	0.5	18	1	US-09-259-411-6	Sequence 6, Appli
	94	16.4	0.5	20	1	US-08-358-171-14	Sequence 14, Appl
	95	16.4	0.5	20	1	US-09-090-947-14	Sequence 14, Appl
c	96	16.4	0.5	20	1	US-09-198-452A-5483	Sequence 5483, Ap
c	97	16	0.5	16	1	US-09-079-839-1	Sequence 1, Appli
	98	16	0.5	16	1	US-09-322-409-134	Sequence 134, App
	99	16	0.5	16	1	US-09-451-527-134	Sequence 134, App
	100	16	0.5	19	1	US-09-422-978-5006	Sequence 5006, Ap
c	101	16	0.5	20	1	US-09-198-452A-5765	Sequence 5765, Ap
c	102	16	0.5	29	1	US-08-434-503-53	Sequence 53, Appl
c	103	15.4	0.5	17	1	US-09-331-347C-5	Sequence 5, Appli

ALIGNMENTS

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RESULT 1
US-08-171-389-214
; Sequence 214, Application US/08171389
; Patent No. 5578444
;  GENERAL INFORMATION:
;    APPLICANT:  Edwards, Cynthia A.
;    APPLICANT:  Cantor, Charles R.
;    APPLICANT:  Andrews, Beth M.
;    APPLICANT:  Turin, Lisa M.
;    APPLICANT:  Fry, Kirk E.
;    TITLE OF INVENTION:  Sequence-Directed DNA Binding
;    TITLE OF INVENTION:  Molecules, Compositions and Methods
;    NUMBER OF SEQUENCES:  641
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genelabs Technologies, Inc.
;      STREET:  505 Penobscot Drive
;      CITY:  Redwood City
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94063
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/171,389
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/123,936
;      FILING DATE:  17-SEP-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/996,783
;      FILING DATE:  23-DEC-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/723,618
;      FILING DATE:  27-JUN-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/081,070
;      FILING DATE:  22-JUN-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Fabian, Gary R.
;      REGISTRATION NUMBER:  33,875
;      REFERENCE/DOCKET NUMBER:  4600-0175/G19P3
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  214:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Human interleukin 5 (IL-5) gene
US-08-171-389-214

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.8;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 2
US-08-123-936-214
; Sequence 214, Application US/08123936
; Patent No. 5726014
;  GENERAL INFORMATION:
;    APPLICANT:  Edwards, Cynthia A.
;    APPLICANT:  Cantor, Charles R.
;    APPLICANT:  Andrews, Beth M.
;    APPLICANT:  Turin, Lisa M.
;    TITLE OF INVENTION:  Screening Assay for the Detection of
;    TITLE OF INVENTION:  DNA-Binding Molecules
;    NUMBER OF SEQUENCES:  640
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genelabs Technologies, Inc.
;      STREET:  505 Penobscot Drive
;      CITY:  Redwood City
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94063
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/123,936
;      FILING DATE:
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/996,783
;      FILING DATE:  23-DEC-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/723,618
;      FILING DATE:  27-JUN-1991
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Fabian, Gary R.
;      REGISTRATION NUMBER:  33,875
;      REFERENCE/DOCKET NUMBER:  4600-0075.32/G19P2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  214:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Human interleukin 5 (IL-5) gene
US-08-123-936-214

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.8;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 3
US-08-475-228A-214
; Sequence 214, Application US/08475228A
; Patent No. 5869241
;  GENERAL INFORMATION:
;    APPLICANT:  Edwards, Cynthia A.
;    APPLICANT:  Cantor, Charles R.
;    APPLICANT:  Andrews, Beth M.
;    APPLICANT:  Turin, Lisa M.
;    APPLICANT:  Fry, Kirk E.
;    TITLE OF INVENTION:  Sequence-Directed DNA Binding
;    TITLE OF INVENTION:  Molecules, Compositions and Methods
;    NUMBER OF SEQUENCES:  664
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;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genelabs Technologies, Inc.
;      STREET:  505 Penobscot Drive
;      CITY:  Redwood City
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94063
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/475,228A
;      FILING DATE:  06-JUN-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/123,936
;      FILING DATE:  17-SEP-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/996,783
;      FILING DATE:  23-DEC-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/723,618
;      FILING DATE:  27-JUN-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/081,070
;      FILING DATE:  22-JUN-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Stratford, Carol A.
;      REGISTRATION NUMBER:  34,444
;      REFERENCE/DOCKET NUMBER:  4600-0175.21/G19P3D2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  214:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Human interleukin 5 (IL-5) gene
US-08-475-228A-214

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.8;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 4
US-08-482-080A-214
; Sequence 214, Application US/08482080A
; Patent No. 6010849
;  GENERAL INFORMATION:
;    APPLICANT:  Edwards, Cynthia A.
;    APPLICANT:  Cantor, Charles R.
;    APPLICANT:  Andrews, Beth M.
;    APPLICANT:  Turin, Lisa M.
;    APPLICANT:  Fry, Kirk E.
;    TITLE OF INVENTION:  Sequence-Directed DNA Binding
;    TITLE OF INVENTION:  Molecules, Compositions and Methods
;    NUMBER OF SEQUENCES:  664
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genelabs Technologies, Inc.
;      STREET:  505 Penobscot Drive
;      CITY:  Redwood City
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94063
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/482,080A
;      FILING DATE:  07-JUN-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/171,389
;      FILING DATE:  20-DEC-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/123,936
;      FILING DATE:  17-SEP-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/996,783
;      FILING DATE:  23-DEC-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/723,618
;      FILING DATE:  27-JUN-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/081,070
;      FILING DATE:  22-JUN-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Brady, John F.
;      REGISTRATION NUMBER:  39,118
;      REFERENCE/DOCKET NUMBER:  4600-0175.20/G19P3D1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (650) 324-0880
;      TELEFAX:  (650) 324-0960
;  INFORMATION FOR SEQ ID NO:  214:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Human interleukin 5 (IL-5) gene
US-08-482-080A-214

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.8;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 5
US-09-354-947-214
; Sequence 214, Application US/09354947
; Patent No. 6384208
;  GENERAL INFORMATION:
;    APPLICANT:  Edwards, Cynthia A.
;    APPLICANT:  Cantor, Charles R.
;    APPLICANT:  Andrews, Beth M.
;    APPLICANT:  Turin, Lisa M.
;    APPLICANT:  Fry, Kirk E.
;    TITLE OF INVENTION:  Sequence-Directed DNA Binding
;    TITLE OF INVENTION:  Molecules, Compositions and Methods
;    NUMBER OF SEQUENCES:  664
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genelabs Technologies, Inc.
;      STREET:  505 Penobscot Drive
;      CITY:  Redwood City
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94063
```

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;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/354,947
;      FILING DATE:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/482,080
;      FILING DATE:  07-JUN-1995
;      APPLICATION NUMBER:  US 08/171,389
;      FILING DATE:  20-DEC-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/123,936
;      FILING DATE:  17-SEP-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/996,783
;      FILING DATE:  23-DEC-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/723,618
;      FILING DATE:  27-JUN-1991
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/081,070
;      FILING DATE:  22-JUN-1993
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Brady, John F.
;      REGISTRATION NUMBER:  39,118
;      REFERENCE/DOCKET NUMBER:  4600-0175.20/G19P3D1
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (650) 324-0880
;      TELEFAX:  (650) 324-0960
;  INFORMATION FOR SEQ ID NO:  214:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Human interleukin 5 (IL-5) gene
US-09-354-947-214

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.8;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 6
PCT-US93-12388-214
; Sequence 214, Application PC/TUS9312388
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  Sequence-Directed DNA Binding
;    TITLE OF INVENTION:  Molecules, Compositions and Methods
;    NUMBER OF SEQUENCES:  641
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genelabs Technologies, Inc.
;      STREET:  505 Penobscot Drive
;      CITY:  Redwood City
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94063
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US93/12388
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/123,936
;      FILING DATE:  17-SEP-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/996,783
;      FILING DATE:  23-DEC-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Fabian, Gary R.
;      REGISTRATION NUMBER:  33,875
;      REFERENCE/DOCKET NUMBER:  4600-0175.41/G19PCT2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  214:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  50 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
;    HYPOTHETICAL:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Human interleukin 5 (IL-5) gene
PCT-US93-12388-214

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.8;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 7
US-08-466-852-2/c
; Sequence 2, Application US/08466852
; Patent No. 5681936
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  A SINGLE STEP PURIFICATION OF
;    TITLE OF INVENTION:  RECOMBINANT HUMAN INTERLEUKIN-5
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merck & Co., Inc.
;      STREET:  126 East Lincoln Avenue
;      CITY:  Rahway
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07065-0907
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.4kb
;      COMPUTER:  Apple Macintosh
;      OPERATING SYSTEM:  System 7.0.1
;      SOFTWARE:  Microsoft Word 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/466,852
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Panzer, Curtis C.
;      REGISTRATION NUMBER:  33,752
;      REFERENCE/DOCKET NUMBER:  19151IA
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908)594-3199
;      TELEFAX:  (908)594-4720
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  47 bases
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;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-466-852-2

  Query Match             1.4%;  Score 45.4;  DB 1;  Length 47;
  Best Local Similarity   97.9%;  Pred. No. 4.9;
  Matches   46;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        551 CCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTGGAGCTGCC 597
              | ||||||||||||||||||||||||||||||||||||||||||||
Db         47 CTATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTGGAGCTGCC 1


RESULT 8
US-08-466-852-3
; Sequence 3, Application US/08466852
; Patent No. 5681936
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  A SINGLE STEP PURIFICATION OF
;    TITLE OF INVENTION:  RECOMBINANT HUMAN INTERLEUKIN-5
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merck & Co., Inc.
;      STREET:  126 East Lincoln Avenue
;      CITY:  Rahway
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07065-0907
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.4kb
;      COMPUTER:  Apple Macintosh
;      OPERATING SYSTEM:  System 7.0.1
;      SOFTWARE:  Microsoft Word 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/466,852
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Panzer, Curtis C.
;      REGISTRATION NUMBER:  33,752
;      REFERENCE/DOCKET NUMBER:  19151IA
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908)594-3199
;      TELEFAX:  (908)594-4720
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  43 bases
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-466-852-3

  Query Match             1.3%;  Score 43;  DB 1;  Length 43;
  Best Local Similarity   100.0%;  Pred. No. 6.2;
  Matches   43;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        586 CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCA 628
              |||||||||||||||||||||||||||||||||||||||||||
Db          1 CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCA 43


RESULT 9
US-09-322-409-135/c
; Sequence 135, Application US/09322409
; Patent No. 6471957
; GENERAL INFORMATION:
;  APPLICANT: Sim, Gek-Kee
;  APPLICANT: Yang, Shumin
;  APPLICANT: Dreitz, Matthew J.
;  APPLICANT: Wonderling, Ramani S.
;  TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
;  TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
;  FILE REFERENCE: IM-2-C1
;  CURRENT APPLICATION NUMBER: US/09/322,409
;  CURRENT FILING DATE: 1999-05-28
;  EARLIER APPLICATION NUMBER: 60/087,306
;  EARLIER FILING DATE: 1998-05-29
;  NUMBER OF SEQ ID NOS: 154
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 135
;   LENGTH: 42
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-09-322-409-135

  Query Match             1.3%;  Score 41.2;  DB 1;  Length 42;
  Best Local Similarity   95.2%;  Pred. No. 7.6;
  Matches   40;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
              |||||||||||||||||||||||:|||||:||||||||||||
Db         42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1


RESULT 10
US-09-451-527-135/c
; Sequence 135, Application US/09451527
; Patent No. 6482403
; GENERAL INFORMATION:
;  APPLICANT: Sim, Gek-Kee
;  APPLICANT: Yang, Shumin
;  APPLICANT: Dreitz, Matthew J.
;  APPLICANT: Wonderling, Ramani S.
;  TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
;  TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
;  FILE REFERENCE: IM-2-C2
;  CURRENT APPLICATION NUMBER: US/09/451,527
;  CURRENT FILING DATE: 1999-12-01
;  EARLIER APPLICATION NUMBER: 09/322,409
;  EARLIER FILING DATE: 1999-05-28
;  EARLIER APPLICATION NUMBER: 60/087,306
;  EARLIER FILING DATE: 1998-05-29
;  NUMBER OF SEQ ID NOS: 174
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 135
;   LENGTH: 42
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-09-451-527-135

  Query Match             1.3%;  Score 41.2;  DB 1;  Length 42;
  Best Local Similarity   95.2%;  Pred. No. 7.6;
  Matches   40;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
              |||||||||||||||||||||||:|||||:||||||||||||
Db         42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1


RESULT 11
US-08-434-503-48
; Sequence 48, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
```

```
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  48:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  34
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-48

  Query Match             1.1%;  Score 34;  DB 1;  Length 34;
  Best Local Similarity   82.4%;  Pred. No. 16;
  Matches   28;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2136 AGACGGAGAGTAAACCAATTCCTAGACTACCTGC 2169
              ||||||||||:|||||||::||:||||:|||:||
Db             1 AGACGGAGAGUAAACCAAUUCCUAGACUACCUGC 34


RESULT 12
US-08-466-852-4/c
; Sequence 4, Application US/08466852
; Patent No. 5681936
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  A SINGLE STEP PURIFICATION OF
;    TITLE OF INVENTION:  RECOMBINANT HUMAN INTERLEUKIN-5
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merck & Co., Inc.
;      STREET:  126 East Lincoln Avenue
;      CITY:  Rahway
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07065-0907
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.4kb
;      COMPUTER:  Apple Macintosh
;      OPERATING SYSTEM:  System 7.0.1
;      SOFTWARE:  Microsoft Word 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/466,852
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Panzer, Curtis C.
;      REGISTRATION NUMBER:  33,752
;      REFERENCE/DOCKET NUMBER:  19151IA
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908)594-3199
;      TELEFAX:  (908)594-4720
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  35 bases
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-466-852-4

  Query Match             1.0%;  Score 33.4;  DB 1;  Length 35;
  Best Local Similarity   97.1%;  Pred. No. 17;
  Matches   34;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        598 TACGTGTATGCCATCCCCACAGAAATTCCCACAAG 632
              ||||||||||||||||||||||||||||||||| ||
Db         35 TACGTGTATGCCATCCCCACAGAAATTCCCACTAG 1


RESULT 13
US-08-466-852-1
; Sequence 1, Application US/08466852
; Patent No. 5681936
;  GENERAL INFORMATION:
;    APPLICANT:
;    TITLE OF INVENTION:  A SINGLE STEP PURIFICATION OF
;    TITLE OF INVENTION:  RECOMBINANT HUMAN INTERLEUKIN-5
;    NUMBER OF SEQUENCES:  4
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Merck & Co., Inc.
;      STREET:  126 East Lincoln Avenue
;      CITY:  Rahway
;      STATE:  New Jersey
;      COUNTRY:  USA
;      ZIP:  07065-0907
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 3.5 in, 1.4kb
;      COMPUTER:  Apple Macintosh
;      OPERATING SYSTEM:  System 7.0.1
;      SOFTWARE:  Microsoft Word 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/466,852
;      FILING DATE:
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Panzer, Curtis C.
;      REGISTRATION NUMBER:  33,752
;      REFERENCE/DOCKET NUMBER:  19151IA
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (908)594-3199
;      TELEFAX:  (908)594-4720
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  39 bases
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-466-852-1

  Query Match             1.0%;  Score 33.4;  DB 1;  Length 39;
  Best Local Similarity   97.1%;  Pred. No. 19;
  Matches   34;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        551 CCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT 585
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                    | ||||||||||||||||||||||||||||||||
Db          5 CTATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT 39


RESULT 14
US-08-434-503-51
; Sequence 51, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  51:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  33
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-51

  Query Match             1.0%;  Score 33;  DB 1;  Length 33;
  Best Local Similarity   75.8%;  Pred. No. 17;
  Matches   25;  Conservative    8;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2344 ATTTCAGGCATACTGACACTTTGCCAGAAAGCA 2376
              |:::|||||:||:|||||:::||||||||||
Db          1 AUUUCAGGCAUACUGACACUUUGCCAGAAAGCA 33


RESULT 15
US-08-721-260-10/c
; Sequence 10, Application US/08721260
; Patent No. 5968755
;  GENERAL INFORMATION:
;    APPLICANT:  Roederer, Mario
;    APPLICANT:  Rabin, Ronald
;    APPLICANT:  Herzenberg, Leonore A.
;    APPLICANT:  Herzenberg, Leonard A.
;    TITLE OF INVENTION:  Methods for Determining T-cell Profiles
;    TITLE OF INVENTION:  of Immunocompromised Subjects
;    NUMBER OF SEQUENCES:  14
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Avenue, Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/721,260
;      FILING DATE:  26-SEP-1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 60/004,364
;      FILING DATE:  27-SEP-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sholtz, Charles K.
;      REGISTRATION NUMBER:  38,615
;      REFERENCE/DOCKET NUMBER:  8600-0161.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  10:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  33 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  IL-5 primer B
US-08-721-260-10

  Query Match             1.0%;  Score 33;  DB 1;  Length 33;
  Best Local Similarity   100.0%;  Pred. No. 17;
  Matches   33;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2184 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
              |||||||||||||||||||||||||||||||||
Db         33 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 1


RESULT 16
US-08-434-503-53
; Sequence 53, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
```

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;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  53:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  29
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-53

  Query Match             0.9%;  Score 29;  DB 1;  Length 29;
  Best Local Similarity   48.3%;  Pred. No. 26;
  Matches   14;  Conservative   15;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2433 CAAAATTGATATACTTTTTTCTTATTTAA 2461
              |||||::||:|:||::::::|::|:::||
Db          1 CAAAAUUGAUAUACUUUUUUCUUAUUUAA 29


RESULT 17
PCT-US94-10957-16/c
; Sequence 16, Application PC/TUS9410957
;  GENERAL INFORMATION:
;    APPLICANT:  Goldstein, Harris; Kollmann, Tobias R.
;    TITLE OF INVENTION:  Immunodeficient Mouse Models of
;    TITLE OF INVENTION:  Pathogenesis of Human Disease and Efficacy and Toxicity of
;    TITLE OF INVENTION:  Disease Treatments
;    NUMBER OF SEQUENCES:  28
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Law Office of Sherman and Shalloway
;      STREET:  413 N. Washington Street
;      CITY:  Alexandria
;      STATE:  Virginia
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch, 360 kb storage
;      COMPUTER:  IBM Clone, 8088 Turbo
;      OPERATING SYSTEM:  MS DOS 5.0
;      SOFTWARE:  Word Perfect, Version 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US94/10957
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Richard A. Steinberg
;      REGISTRATION NUMBER:  26,588
;      REFERENCE/DOCKET NUMBER:  BOG-139/CIP II
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 549-2282
;      TELEFAX:  (703) 836-0106
;  INFORMATION FOR SEQ ID NO:  16:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  29 nucleotides
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  no
;    ORIGINAL SOURCE:
;      ORGANISM:  human
;    FEATURE:
;      NAME/KEY:  3' IL-5
PCT-US94-10957-16

  Query Match             0.9%;  Score 29;  DB 1;  Length 29;
  Best Local Similarity   100.0%;  Pred. No. 26;
  Matches   29;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2144 AGTAAACCAATTCCTAGACTACCTGCAAG 2172
              |||||||||||||||||||||||||||||
Db         29 AGTAAACCAATTCCTAGACTACCTGCAAG 1


RESULT 18
US-08-859-998-56/c
; Sequence 56, Application US/08859998
; Patent No. 5994076
;  GENERAL INFORMATION:
;    APPLICANT:  Chenchik, Alex
;    APPLICANT:  Jokhadze, George
;    APPLICANT:  Bibilashvilli, Robert
;    TITLE OF INVENTION:  METHOD OF ASSAYING DIFFERENTIAL
;    TITLE OF INVENTION:  EXPRESSION
;    NUMBER OF SEQUENCES:  1375
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson, P.C.
;      STREET:  2200 Sand Hill Road, Suite 100
;      CITY:  Menlo Park
;      STATE:  CA
;      COUNTRY:  US
;      ZIP:  94025
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Windows95
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/859,998
;      FILING DATE:  21-MAY-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Field, Bret E.
;      REGISTRATION NUMBER:  37,620
;      REFERENCE/DOCKET NUMBER:  09096/002001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-322-5070
;      TELEFAX:  415-854-0875
;  INFORMATION FOR SEQ ID NO:  56:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  28 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    FEATURE:
;      OTHER INFORMATION:  oligonucleotide primer
US-08-859-998-56

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
              ||||||||||||||||||||||||||||
Db         28 GGGAATAGGCACACTGGAGAGTCAAACT 1


RESULT 19
US-09-225-928-56/c
```

```
; Sequence 56, Application US/09225928
; Patent No. 6352829
;  GENERAL INFORMATION:
;       APPLICANT: Chenchik, Alex
;                  Jokhadze, George
;                  Bibilashvilli, Robert
;       TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                           EXPRESSION
;       NUMBER OF SEQUENCES: 1375
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Fish & Richardson, P.C.
;            STREET: 2200 Sand Hill Road, Suite 100
;            CITY: Menlo Park
;            STATE: CA
;            COUNTRY: US
;            ZIP: 94025
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: Windows95
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/225,928
;            FILING DATE: 05-Jan-1999
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/859,998
;            FILING DATE: 21-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Field, Bret E.
;            REGISTRATION NUMBER: 37,620
;            REFERENCE/DOCKET NUMBER: 09096/002001
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415-322-5070
;            TELEFAX: 415-854-0875
;  INFORMATION FOR SEQ ID NO: 56:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 28 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA
;       FEATURE:
;            OTHER INFORMATION:  oligonucleotide primer
;       SEQUENCE DESCRIPTION: SEQ ID NO: 56:
US-09-225-928-56

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
             ||||||||||||||||||||||||||||
Db         28 GGGAATAGGCACACTGGAGAGTCAAACT 1


RESULT 20
US-09-225-201B-56/c
; Sequence 56, Application US/09225201B
; Patent No. 6489455
;  GENERAL INFORMATION:
;       APPLICANT: Chenchik, Alex
;                  Jokhadze, George
;                  Bibilashvilli, Robert
;       TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                           EXPRESSION
;       NUMBER OF SEQUENCES: 1375
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Fish & Richardson, P.C.
;            STREET: 2200 Sand Hill Road, Suite 100
;            CITY: Menlo Park
;            STATE: CA
;            COUNTRY: US
;            ZIP: 94025
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: Windows95
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/225,201B
;            FILING DATE: 05-Jan-1999
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: US/08/859,998
;            FILING DATE: 21-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Field, Bret E.
;            REGISTRATION NUMBER: 37,620
;            REFERENCE/DOCKET NUMBER: 09096/002001
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415-322-5070
;            TELEFAX: 415-854-0875
;  INFORMATION FOR SEQ ID NO: 56:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 28 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA
;       FEATURE:
;            OTHER INFORMATION:  oligonucleotide primer
;       SEQUENCE DESCRIPTION: SEQ ID NO: 56:
US-09-225-201B-56

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
             ||||||||||||||||||||||||||||
Db         28 GGGAATAGGCACACTGGAGAGTCAAACT 1


RESULT 21
US-09-371-615A-5
; Sequence 5, Application US/09371615A
; Patent No. 6537781
; GENERAL INFORMATION:
;  APPLICANT: IDEXX LABORATORIES
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
;  TITLE OF INVENTION:  CANINE INTERLEUKIN 5
;  FILE REFERENCE: 036040001700US00
;  CURRENT APPLICATION NUMBER: US/09/371,615A
;  CURRENT FILING DATE:  1999-08-10
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
;   LENGTH: 28
;   TYPE: DNA
;   ORGANISM: Canis familiaris
;   FEATURE:
;   OTHER INFORMATION: PCR primer
US-09-371-615A-5

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        440 CTGATTGTTAGAAATTATTCATTTCCTC 467
             ||||||||||||||||||||||||||||
Db          1 CTGATTGTTAGAAATTATTCATTTCCTC 28


RESULT 22
US-09-887-145-24/c
```

```
; Sequence 24, Application US/09887145
; Patent No. 6780641
;  GENERAL INFORMATION:
;       APPLICANT: Kim, Seung U
;       TITLE OF INVENTION: Immortalized human microglia
;                           cell and continuous cell line
;       NUMBER OF SEQUENCES: 54
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: David Prashker, Esq.
;            STREET: P.O. Box 5387
;            CITY: Magnolia
;            STATE: Massachusetts
;            COUNTRY: USA
;            ZIP: 01930
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage
;            COMPUTER: Dell PC
;            OPERATING SYSTEM: MS DOS
;            SOFTWARE: Microsoft Word version 97
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/887,145
;            FILING DATE: 22-Jun-2001
;            CLASSIFICATION: Unknown
;       ATTORNEY/AGENT INFORMATION:
;            NAME: David Prashker, Esq.
;            REGISTRATION NUMBER: 29,693
;            REFERENCE/DOCKET NUMBER: UBC-002
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: (978) 525-3794
;  INFORMATION FOR SEQ ID NO: 24:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 28 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       SEQUENCE DESCRIPTION: SEQ ID NO: 24:
US-09-887-145-24

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 28;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1975 CTTGTCCTTAATAAAGAAATACATTGAC 2002
             ||||||||||||||||||||||||||||
Db         28 CTTGTCCTTAATAAAGAAATACATTGAC 1


RESULT 23
US-08-434-503-41
; Sequence 41, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  41:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  27
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-41

  Query Match             0.8%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   59.3%;  Pred. No. 31;
  Matches   16;  Conservative   11;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        569 ATTTGAGTTTGCTAGCTCTTGGAGCTG 595
              |:::|||:::||:|||:|::|||||:|
Db          1 AUUUGAGUUUGCUAGCUCUUGGAGCUG 27


RESULT 24
US-08-859-998-55
; Sequence 55, Application US/08859998
; Patent No. 5994076
;  GENERAL INFORMATION:
;    APPLICANT:  Chenchik, Alex
;    APPLICANT:  Jokhadze, George
;    APPLICANT:  Bibilashvilli, Robert
;    TITLE OF INVENTION:  METHOD OF ASSAYING DIFFERENTIAL
;    TITLE OF INVENTION:  EXPRESSION
;    NUMBER OF SEQUENCES:  1375
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson, P.C.
;      STREET:  2200 Sand Hill Road, Suite 100
;      CITY:  Menlo Park
;      STATE:  CA
;      COUNTRY:  US
;      ZIP:  94025
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  Windows95
;      SOFTWARE:  FastSEQ for Windows Version 2.0
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/859,998
;      FILING DATE:  21-MAY-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Field, Bret E.
;      REGISTRATION NUMBER:  37,620
;      REFERENCE/DOCKET NUMBER:  09096/002001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-322-5070
;      TELEFAX:  415-854-0875
;  INFORMATION FOR SEQ ID NO:  55:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  26 base pairs
;      TYPE:  nucleic acid
```

```
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    FEATURE:
;      OTHER INFORMATION:  oligonucleotide primer
US-08-859-998-55

  Query Match             0.8%;  Score 26;  DB 1;  Length 26;
  Best Local Similarity   100.0%;  Pred. No. 34;
  Matches   26;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        543 TTTCAGAGCCATGAGGATGCTTCTGC 568
              ||||||||||||||||||||||||||
Db          1 TTTCAGAGCCATGAGGATGCTTCTGC 26


RESULT 25
US-09-225-928-55
; Sequence 55, Application US/09225928
; Patent No. 6352829
;   GENERAL INFORMATION:
;        APPLICANT: Chenchik, Alex
;                   Jokhadze, George
;                   Bibilashvilli, Robert
;        TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                            EXPRESSION
;        NUMBER OF SEQUENCES: 1375
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Fish & Richardson, P.C.
;             STREET: 2200 Sand Hill Road, Suite 100
;             CITY: Menlo Park
;             STATE: CA
;             COUNTRY: US
;             ZIP: 94025
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: Windows95
;             SOFTWARE: FastSEQ for Windows Version 2.0
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/225,928
;             FILING DATE: 05-Jan-1999
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: 08/859,998
;             FILING DATE: 21-MAY-1997
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Field, Bret E.
;             REGISTRATION NUMBER: 37,620
;             REFERENCE/DOCKET NUMBER: 09096/002001
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 415-322-5070
;             TELEFAX: 415-854-0875
;   INFORMATION FOR SEQ ID NO: 55:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 26 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: DNA
;        FEATURE:
;             OTHER INFORMATION:  oligonucleotide primer
;        SEQUENCE DESCRIPTION: SEQ ID NO: 55:
US-09-225-928-55

  Query Match             0.8%;  Score 26;  DB 1;  Length 26;
  Best Local Similarity   100.0%;  Pred. No. 34;
  Matches   26;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        543 TTTCAGAGCCATGAGGATGCTTCTGC 568
              ||||||||||||||||||||||||||
Db          1 TTTCAGAGCCATGAGGATGCTTCTGC 26


RESULT 26
US-09-225-201B-55
; Sequence 55, Application US/09225201B
; Patent No. 6489455
;   GENERAL INFORMATION:
;        APPLICANT: Chenchik, Alex
;                   Jokhadze, George
;                   Bibilashvilli, Robert
;        TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                            EXPRESSION
;        NUMBER OF SEQUENCES: 1375
;        CORRESPONDENCE ADDRESS:
;             ADDRESSEE: Fish & Richardson, P.C.
;             STREET: 2200 Sand Hill Road, Suite 100
;             CITY: Menlo Park
;             STATE: CA
;             COUNTRY: US
;             ZIP: 94025
;        COMPUTER READABLE FORM:
;             MEDIUM TYPE: Diskette
;             COMPUTER: IBM Compatible
;             OPERATING SYSTEM: Windows95
;             SOFTWARE: FastSEQ for Windows Version 2.0
;        CURRENT APPLICATION DATA:
;             APPLICATION NUMBER: US/09/225,201B
;             FILING DATE: 05-Jan-1999
;             CLASSIFICATION: <Unknown>
;        PRIOR APPLICATION DATA:
;             APPLICATION NUMBER: US/08/859,998
;             FILING DATE: 21-MAY-1997
;        ATTORNEY/AGENT INFORMATION:
;             NAME: Field, Bret E.
;             REGISTRATION NUMBER: 37,620
;             REFERENCE/DOCKET NUMBER: 09096/002001
;        TELECOMMUNICATION INFORMATION:
;             TELEPHONE: 415-322-5070
;             TELEFAX: 415-854-0875
;   INFORMATION FOR SEQ ID NO: 55:
;        SEQUENCE CHARACTERISTICS:
;             LENGTH: 26 base pairs
;             TYPE: nucleic acid
;             STRANDEDNESS: single
;             TOPOLOGY: linear
;        MOLECULE TYPE: DNA
;        FEATURE:
;             OTHER INFORMATION:  oligonucleotide primer
;        SEQUENCE DESCRIPTION: SEQ ID NO: 55:
US-09-225-201B-55

  Query Match             0.8%;  Score 26;  DB 1;  Length 26;
  Best Local Similarity   100.0%;  Pred. No. 34;
  Matches   26;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        543 TTTCAGAGCCATGAGGATGCTTCTGC 568
              ||||||||||||||||||||||||||
Db          1 TTTCAGAGCCATGAGGATGCTTCTGC 26


RESULT 27
US-09-322-409-136/c
; Sequence 136, Application US/09322409
; Patent No. 6471957
; GENERAL INFORMATION:
;  APPLICANT: Sim, Gek-Kee
;  APPLICANT: Yang, Shumin
;  APPLICANT: Dreitz, Matthew J.
;  APPLICANT: Wonderling, Ramani S.
;  TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
;  TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
;  FILE REFERENCE: IM-2-C1
;  CURRENT APPLICATION NUMBER: US/09/322,409
;  CURRENT FILING DATE: 1999-05-28
```

```
;  EARLIER APPLICATION NUMBER: 60/087,306
;  EARLIER FILING DATE: 1998-05-29
;  NUMBER OF SEQ ID NOS: 154
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 136
;   LENGTH: 27
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-09-322-409-136

  Query Match             0.8%;  Score 25.4;  DB 1;  Length 27;
  Best Local Similarity   85.2%;  Pred. No. 38;
  Matches   23;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
                ||||||||||:||||::|||:|||||
Db         27 TGAGAATGAGGSCCAASMAAGRGTCAG 1


RESULT 28
US-09-451-527-136/c
; Sequence 136, Application US/09451527
; Patent No. 6482403
; GENERAL INFORMATION:
;  APPLICANT: Sim, Gek-Kee
;  APPLICANT: Yang, Shumin
;  APPLICANT: Dreitz, Matthew J.
;  APPLICANT: Wonderling, Ramani S.
;  TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
;  TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
;  FILE REFERENCE: IM-2-C2
;  CURRENT APPLICATION NUMBER: US/09/451,527
;  CURRENT FILING DATE: 1999-12-01
;  EARLIER APPLICATION NUMBER: 09/322,409
;  EARLIER FILING DATE: 1999-05-28
;  EARLIER APPLICATION NUMBER: 60/087,306
;  EARLIER FILING DATE: 1998-05-29
;  NUMBER OF SEQ ID NOS: 174
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 136
;   LENGTH: 27
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-09-451-527-136

  Query Match             0.8%;  Score 25.4;  DB 1;  Length 27;
  Best Local Similarity   85.2%;  Pred. No. 38;
  Matches   23;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
                ||||||||||:||||::|||:|||||
Db         27 TGAGAATGAGGSCCAASMAAGRGTCAG 1


RESULT 29
US-09-887-145-23
; Sequence 23, Application US/09887145
; Patent No. 6780641
;  GENERAL INFORMATION:
;       APPLICANT: Kim, Seung U
;       TITLE OF INVENTION: Immortalized human microglia
;                           cell and continuous cell line
;       NUMBER OF SEQUENCES: 54
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: David Prashker, Esq.
;            STREET: P.O. Box 5387
;            CITY: Magnolia
;            STATE: Massachusetts
;            COUNTRY: USA
;            ZIP: 01930
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette, 3.50 inch, 1.40 Mb storage
;            COMPUTER: Dell PC
;            OPERATING SYSTEM: MS DOS
;            SOFTWARE: Microsoft Word version 97
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/887,145
;            FILING DATE: 22-Jun-2001
;            CLASSIFICATION: Unknown
;       ATTORNEY/AGENT INFORMATION:
;            NAME: David Prashker, Esq.
;            REGISTRATION NUMBER: 29,693
;            REFERENCE/DOCKET NUMBER: UBC-002
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: (978) 525-3794
;  INFORMATION FOR SEQ ID NO: 23:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 25 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: peptide
;       SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-09-887-145-23

  Query Match             0.8%;  Score 25;  DB 1;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        555 GAGGATGCTTCTGCATTTGAGTTTG 579
                |||||||||||||||||||||||||
Db          1 GAGGATGCTTCTGCATTTGAGTTTG 25


RESULT 30
US-08-592-126-14
; Sequence 14, Application US/08592126
; Patent No. 5821091
;  GENERAL INFORMATION:
;    APPLICANT:  Gregory Dolganov
;    TITLE OF INVENTION:  Transcripts Encoding Immunomodulatory
;    TITLE OF INVENTION:  Polypeptides
;    NUMBER OF SEQUENCES:  151
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Avenue, Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/592,126
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sholtz, Charles K.
;      REGISTRATION NUMBER:  38,615
;      REFERENCE/DOCKET NUMBER:  4600-0111
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  14:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
```

```
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Primer IL5-1
US-08-592-126-14

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 41;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
             ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 31
US-08-687-080-14
; Sequence 14, Application US/08687080
; Patent No. 5965427
;  GENERAL INFORMATION:
;    APPLICANT:  Gregory Dolganov
;    TITLE OF INVENTION:  Human RAD50 Gene and Methods of Use Thereof
;    NUMBER OF SEQUENCES:  175
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Avenue, Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/687,080
;      FILING DATE:  17-JUL-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/592,126
;      FILING DATE:  26-JAN-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sholtz, Charles K.
;      REGISTRATION NUMBER:  38,615
;      REFERENCE/DOCKET NUMBER:  4600-0111.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  14:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Primer IL5-1
US-08-687-080-14

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 41;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
             ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 32
US-09-168-595-14
; Sequence 14, Application US/09168595
; Patent No. 6555666
;  GENERAL INFORMATION:
;    APPLICANT:  Gregory Dolganov
;    TITLE OF INVENTION:  Transcripts Encoding Immunomodulatory
;    TITLE OF INVENTION:  Polypeptides
;    NUMBER OF SEQUENCES:  151
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Avenue, Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/168,595
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/592,126
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sholtz, Charles K.
;      REGISTRATION NUMBER:  38,615
;      REFERENCE/DOCKET NUMBER:  4600-0111
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  14:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  24 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Primer IL5-1
US-09-168-595-14

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 41;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
             ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 33
US-08-434-503-47
; Sequence 47, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
```

```
;       STATE:  California
;       COUNTRY:  USA
;       ZIP:  90017
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;       COMPUTER:  IBM Compatible
;       OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;       SOFTWARE:  WordPerfect (Version 5.1)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/434,503
;       FILING DATE:  04-MAY-1995
;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/008,895
;       FILING DATE:  19-JAN-1993
;       APPLICATION NUMBER:  07/989,849
;       FILING DATE:  December 7, 1992
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Warburg, Richard J.
;       REGISTRATION NUMBER:  32,327
;       REFERENCE/DOCKET NUMBER:  200/276
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (213) 489-1600
;       TELEFAX:  (213) 955-0440
;       TELEX:  67-3510
;   INFORMATION FOR SEQ ID NO:  47:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  23
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
US-08-434-503-47

  Query Match             0.7%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   73.9%;  Pred. No. 45;
  Matches   17;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1959 AAAGACTATTCAAAAACTTGTCC 1981
              |||||||:|::|||||||::|:||
Db          1 AAAGACUAUUCAAAAACUUGUCC 23


RESULT 34
US-09-617-548-13
; Sequence 13, Application US/09617548
; Patent No. 6476214
; GENERAL INFORMATION:
;  APPLICANT:  EAGLES, Peter Anthony Minter
;  APPLICANT:  ZHENG, Richard  Qihao
;  TITLE OF INVENTION:  INHIBITION OF CYTOKINE PRODUCTION
;  FILE REFERENCE:  N & V 604-557  BTG 137 766
;  CURRENT APPLICATION NUMBER: US/09/617,548
;  CURRENT FILING DATE:  2000-07-14
;  PRIOR APPLICATION NUMBER:  GB 9801391.5
;  PRIOR FILING DATE:  1998-01-22
;  PRIOR APPLICATION NUMBER:  GB 9824794.3
;  PRIOR FILING DATE:  1998-11-11
;  PRIOR APPLICATION NUMBER:  PCT/GB99/00179
;  PRIOR FILING DATE:  1999-01-20
;  NUMBER OF SEQ ID NOS:  15
;  SOFTWARE:  PatentIn Ver. 2.0
; SEQ ID NO 13
;   LENGTH: 27
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Oligomer
;   OTHER INFORMATION: containing palindromic sequence from human IL-5
;   OTHER INFORMATION: promoter
US-09-617-548-13

  Query Match             0.7%;  Score 22.4;  DB 1;  Length 27;
  Best Local Similarity   95.8%;  Pred. No. 53;
  Matches   23;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         31 CGACCCTGCCAAGGCTTGGCATTT 54
              |||||||||||||||||||||| ||
Db          1 CGACCCTGCCAAGGCTTGGCAGTT 24


RESULT 35
US-08-434-503-40
; Sequence 40, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  40:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  22
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-40

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   77.3%;  Pred. No. 49;
  Matches   17;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        541 CGTTTCAGAGCCATGAGGATGC 562
              ||:::||:|||||||:|||||:||
Db          1 CGUUUCAGAGCCAUGAGGAUGC 22


RESULT 36
US-08-434-503-44
; Sequence 44, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
```

```
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  44:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  22
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-44

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   68.2%;  Pred. No. 49;
  Matches   15;  Conservative    7;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        666 TACTCATCGAACTCTGCTGATA 687
              :||:||:|||||:|:||:||:|
Db          1 UACUCAUCGAACUCUGCUGAUA 22


RESULT 37
US-08-721-260-9
; Sequence 9, Application US/08721260
; Patent No. 5968755
;  GENERAL INFORMATION:
;    APPLICANT:  Roederer, Mario
;    APPLICANT:  Rabin, Ronald
;    APPLICANT:  Herzenberg, Leonore A.
;    APPLICANT:  Herzenberg, Leonard A.
;    TITLE OF INVENTION:  Methods for Determining T-cell Profiles
;    TITLE OF INVENTION:  of Immunocompromised Subjects
;    NUMBER OF SEQUENCES:  14
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Avenue, Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/721,260
;      FILING DATE:  26-SEP-1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 60/004,364
;      FILING DATE:  27-SEP-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sholtz, Charles K.
;      REGISTRATION NUMBER:  38,615
;      REFERENCE/DOCKET NUMBER:  8600-0161.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  9:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  22 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  IL-5 primer A
US-08-721-260-9

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 49;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        579 GCTAGCTCTTGGAGCTGCCTAC 600
              ||||||||||||||||||||||
Db          1 GCTAGCTCTTGGAGCTGCCTAC 22


RESULT 38
US-08-592-126-15/c
; Sequence 15, Application US/08592126
; Patent No. 5821091
;  GENERAL INFORMATION:
;    APPLICANT:  Gregory Dolganov
;    TITLE OF INVENTION:  Transcripts Encoding Immunomodulatory
;    TITLE OF INVENTION:  Polypeptides
;    NUMBER OF SEQUENCES:  151
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Avenue, Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/592,126
;      FILING DATE:
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sholtz, Charles K.
;      REGISTRATION NUMBER:  38,615
;      REFERENCE/DOCKET NUMBER:  4600-0111
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  15:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
```

```
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Primer IL4-2
US-08-592-126-15

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 53;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
             |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 39
US-08-687-080-15/c
; Sequence 15, Application US/08687080
; Patent No. 5965427
;  GENERAL INFORMATION:
;    APPLICANT:  Gregory Dolganov
;    TITLE OF INVENTION:  Human RAD50 Gene and Methods of Use Thereof
;    NUMBER OF SEQUENCES:  175
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Avenue, Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/687,080
;      FILING DATE:  17-JUL-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/592,126
;      FILING DATE:  26-JAN-1996
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sholtz, Charles K.
;      REGISTRATION NUMBER:  38,615
;      REFERENCE/DOCKET NUMBER:  4600-0111.30
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  15:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Primer IL4-2
US-08-687-080-15

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 53;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
             |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 40
```

```
US-08-621-841-11
; Sequence 11, Application US/08621841
; Patent No. 6096869
;  GENERAL INFORMATION:
;    APPLICANT:  Stanley, Margaret A.
;    APPLICANT:  Scarpini, Cinzia G.
;    TITLE OF INVENTION:  TREATMENT OF PAPILLOMAVIRUS-ASSOCIATED
;    TITLE OF INVENTION:  LESIONS
;    NUMBER OF SEQUENCES:  58
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Flehr, Hohbach, Test, Albritton & Herbert
;      STREET:  Four Embarcadero Center, Suite 3400
;      CITY:  San Francisco
;      STATE:  California
;      COUNTRY:  United States
;      ZIP:  94111
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/621,841
;      FILING DATE:  22-MAR-1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB 9505784.0
;      FILING DATE:  22-MAR-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Dreger, Walter H.
;      REGISTRATION NUMBER:  24,190
;      REFERENCE/DOCKET NUMBER:  A-63316
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 781-1989
;      TELEFAX:  (415) 398-3249
;  INFORMATION FOR SEQ ID NO:  11:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-621-841-11

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 53;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        553 ATGAGGATGCTTCTGCATTTG 573
              |||||||||||||||||||||
Db          1 ATGAGGATGCTTCTGCATTTG 21


RESULT 41
US-09-168-595-15/c
; Sequence 15, Application US/09168595
; Patent No. 6555666
;  GENERAL INFORMATION:
;    APPLICANT:  Gregory Dolganov
;    TITLE OF INVENTION:  Transcripts Encoding Immunomodulatory
;    TITLE OF INVENTION:  Polypeptides
;    NUMBER OF SEQUENCES:  151
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Dehlinger & Associates
;      STREET:  350 Cambridge Avenue, Suite 250
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94306
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
```

```
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/168,595
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/592,126
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Sholtz, Charles K.
;      REGISTRATION NUMBER:  38,615
;      REFERENCE/DOCKET NUMBER:  4600-0111
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 324-0880
;      TELEFAX:  (415) 324-0960
;  INFORMATION FOR SEQ ID NO:  15:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
;    ORIGINAL SOURCE:
;      INDIVIDUAL ISOLATE:  Primer IL4-2
US-09-168-595-15

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 53;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
             |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 42
PCT-US94-10957-15
; Sequence 15, Application PC/TUS9410957
;  GENERAL INFORMATION:
;    APPLICANT:  Goldstein, Harris; Kollmann, Tobias R.
;    TITLE OF INVENTION:  Immunodeficient Mouse Models of
;    TITLE OF INVENTION:  Pathogenesis of Human Disease and Efficacy and Toxicity of
;    TITLE OF INVENTION:  Disease Treatments
;    NUMBER OF SEQUENCES:  28
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Law Office of Sherman and Shalloway
;      STREET:  413 N. Washington Street
;      CITY:  Alexandria
;      STATE:  Virginia
;      COUNTRY:  USA
;      ZIP:  22314
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette, 5.25 inch, 360 kb storage
;      COMPUTER:  IBM Clone, 8088 Turbo
;      OPERATING SYSTEM:  MS DOS 5.0
;      SOFTWARE:  Word Perfect, Version 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US94/10957
;      FILING DATE:
;      CLASSIFICATION:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Richard A. Steinberg
;      REGISTRATION NUMBER:  26,588
;      REFERENCE/DOCKET NUMBER:  BOG-139/CIP II
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 549-2282
;      TELEFAX:  (703) 836-0106
;  INFORMATION FOR SEQ ID NO:  15:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  21 nucleotides
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
;    HYPOTHETICAL:  no
;    ORIGINAL SOURCE:
;      ORGANISM:  human
;    FEATURE:
;      NAME/KEY:  5' IL-5
PCT-US94-10957-15

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 53;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        577 TTGCTAGCTCTTGGAGCTGCC 597
              |||||||||||||||||||||
Db          1 TTGCTAGCTCTTGGAGCTGCC 21


RESULT 43
US-09-280-799-39/c
; Sequence 39, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 39
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-39

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 44
US-09-280-799-40/c
; Sequence 40, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 40
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
```

US-09-280-799-40

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1
```

RESULT 45
US-09-280-799-41/c
; Sequence 41, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 41
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-41

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        540 ACGTTTCAGAGCCATGAGGA 559
              ||||||||||||||||||||
Db         20 ACGTTTCAGAGCCATGAGGA 1
```

RESULT 46
US-09-280-799-42/c
; Sequence 42, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-42

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1
```

RESULT 47
US-09-280-799-43/c
; Sequence 43, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 43
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-43

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        857 TGAATGCTGGTGTGCTGTAA 876
              ||||||||||||||||||||
Db         20 TGAATGCTGGTGTGCTGTAA 1
```

RESULT 48
US-09-280-799-44/c
; Sequence 44, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 44
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-44

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1
```

RESULT 49
US-09-280-799-45/c
; Sequence 45, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G

```
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 45
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-45

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        905 ACTCTGAGGATTCCTGTTCC 924
              ||||||||||||||||||||
Db         20 ACTCTGAGGATTCCTGTTCC 1


RESULT 50
US-09-280-799-46/c
; Sequence 46, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 46
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-46

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 51
US-09-280-799-47/c
; Sequence 47, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 47
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-47

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        964 TGATGGCATGAATAAGTAAA 983
              ||||||||||||||||||||
Db         20 TGATGGCATGAATAAGTAAA 1


RESULT 52
US-09-280-799-48/c
; Sequence 48, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 48
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-48

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1161 TTCCCAAAGAGCATCGTGTC 1180
              ||||||||||||||||||||
Db         20 TTCCCAAAGAGCATCGTGTC 1


RESULT 53
US-09-280-799-49/c
; Sequence 49, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 49
;    LENGTH: 20
;    TYPE: DNA
;    ORGANISM: Artificial Sequence
;    FEATURE:
;    OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-49

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
```

Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1407 TGCCTGGTCATATTAAAATG 1426
              ||||||||||||||||||||
Db         20 TGCCTGGTCATATTAAAATG 1
```

RESULT 54
US-09-280-799-50/c
; Sequence 50, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 50
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-50

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1627 TGGTGGTTTGTTGCCTAGAA 1646
              ||||||||||||||||||||
Db         20 TGGTGGTTTGTTGCCTAGAA 1
```

RESULT 55
US-09-280-799-51/c
; Sequence 51, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 51
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-51

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1
```

RESULT 56
US-09-280-799-52/c
; Sequence 52, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 52
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-52

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1884 ACCAACTGTGCACTGAAGAA 1903
              ||||||||||||||||||||
Db         20 ACCAACTGTGCACTGAAGAA 1
```

RESULT 57
US-09-280-799-53/c
; Sequence 53, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 53
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-53

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1932 GTCAAACTGTGCAAGGGGGT 1951
              ||||||||||||||||||||
Db         20 GTCAAACTGTGCAAGGGGGT 1
```

RESULT 58
US-09-280-799-54/c
; Sequence 54, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340

```
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 54
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-54

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1988 AAGAAATACATTGACGGCCA 2007
              ||||||||||||||||||||
Db         20 AAGAAATACATTGACGGCCA 1


RESULT 59
US-09-280-799-55/c
; Sequence 55, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 55
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-55

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
              ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 60
US-09-280-799-56/c
; Sequence 56, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 56
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-56

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2051 GCTGTGCCTATTTCTATGGA 2070
              ||||||||||||||||||||
Db         20'GCTGTGCCTATTTCTATGGA 1


RESULT 61
US-09-280-799-57/c
; Sequence 57, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 57
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-57

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 62
US-09-280-799-58/c
; Sequence 58, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 58
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-58

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2135 AAGACGGAGAGTAAACCAAT 2154
              ||||||||||||||||||||
```

```
Db         20 AAGACGGAGAGTAAACCAAT 1


RESULT 63
US-09-280-799-59/c
; Sequence 59, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 59
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-59

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2186 AATGAACACCGAGTGGATAA 2205
             ||||||||||||||||||||
Db         20 AATGAACACCGAGTGGATAA 1


RESULT 64
US-09-280-799-60/c
; Sequence 60, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 60
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-60

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2241 AAGATTTTGGAGGAGAAGGA 2260
             ||||||||||||||||||||
Db         20 AAGATTTTGGAGGAGAAGGA 1


RESULT 65
US-09-280-799-61/c
; Sequence 61, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 61
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-61

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
             ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 66
US-09-280-799-62/c
; Sequence 62, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 62
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-62

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
             ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 67
US-09-280-799-63/c
; Sequence 63, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
```

; SEQ ID NO 63
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-63

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2416 AAGTATTTTCCTCCAGGCAA 2435
||||||||||||||||||||
Db 20 AAGTATTTTCCTCCAGGCAA 1

RESULT 68
US-09-280-799-64/c
; Sequence 64, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 64
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-64

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 509 ATGCACTTTCTTTGCCAAAG 528
||||||||||||||||||||
Db 20 ATGCACTTTCTTTGCCAAAG 1

RESULT 69
US-09-280-799-65/c
; Sequence 65, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 65
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-65

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 523 CCAAAGGCAAACGCAGAACG 542
||||||||||||||||||||
Db 20 CCAAAGGCAAACGCAGAACG 1

RESULT 70
US-09-280-799-66/c
; Sequence 66, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 66
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-66

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 688 GCCAATGAGGTAATTTTCTT 707
||||||||||||||||||||
Db 20 GCCAATGAGGTAATTTTCTT 1

RESULT 71
US-09-280-799-67/c
; Sequence 67, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Karras, James G
; APPLICANT: McKay, Robert
; TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
; TITLE OF INVENTION: TRANSDUCTION
; FILE REFERENCE: ISPH-0340
; CURRENT APPLICATION NUMBER: US/09/280,799
; CURRENT FILING DATE: 1999-03-26
; NUMBER OF SEQ ID NOS: 208
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 67
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-67

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 57;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 895 TCCTCTCCAGACTCTGAGGA 914
||||||||||||||||||||
Db 20 TCCTCTCCAGACTCTGAGGA 1

RESULT 72

```
US-09-280-799-68/c
; Sequence 68, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 68
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-68

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 73
US-09-280-799-69/c
; Sequence 69, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 69
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-69

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 74
US-09-280-799-70/c
; Sequence 70, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 70
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-70

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
              ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 75
US-09-280-799-71/c
; Sequence 71, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 71
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-71

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 76
US-09-758-881-152/c
; Sequence 152, Application US/09758881
; Patent No. 6727064
; GENERAL INFORMATION:
;  APPLICANT:  Karras, James G
;  TITLE OF INVENTION:  Antisense Oligonucleotide Modulation of STAT3
;  TITLE OF INVENTION:  Expression
;  FILE REFERENCE:  ISPH-0532
;  CURRENT APPLICATION NUMBER: US/09/758,881
;  CURRENT FILING DATE:  2001-01-11
;  PRIOR APPLICATION NUMBER:  PCT/US00/09054
;  PRIOR FILING DATE:  2000-04-06
;  PRIOR APPLICATION NUMBER:  09/288,461
;  PRIOR FILING DATE:  1999-04-08
;  NUMBER OF SEQ ID NOS:  152
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 152
;   LENGTH: 20
```

```
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: Synthetic
US-09-758-881-152

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
             ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 77
US-09-371-615A-4/c
; Sequence 4, Application US/09371615A
; Patent No. 6537781
; GENERAL INFORMATION:
;  APPLICANT: IDEXX LABORATORIES
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
;  TITLE OF INVENTION:  CANINE INTERLEUKIN 5
;  FILE REFERENCE: 03604001700US00
;  CURRENT APPLICATION NUMBER: US/09/371,615A
;  CURRENT FILING DATE:  1999-08-10
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 4
;   LENGTH: 22
;   TYPE: DNA
;   ORGANISM: Canis familiaris
;   FEATURE:
;   OTHER INFORMATION: PCR primer
US-09-371-615A-4

  Query Match             0.6%;  Score 18.8;  DB 1;  Length 22;
  Best Local Similarity   90.9%;  Pred. No. 70;
  Matches   20;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2196 GAGTGGATAATAGAAAGTTGAG 2217
             ||||||| ||| ||||||||||
Db         22 GAGTGGACAATGGAAAGTTGAG 1


RESULT 78
US-09-280-799-15/c
; Sequence 15, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 15
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-15

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 69;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1986 TAAAGAAATACATTGACGGC 2005
                ||||||||||||||||| ||
Db         20 TAAAGAAATACATTGACCGC 1


RESULT 79
US-09-280-799-72/c
; Sequence 72, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 72
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-72

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 69;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
             |||||||||| |||||||||
Db         20 CATACTGACAGTTTGCCAGA 1


RESULT 80
US-09-280-799-75/c
; Sequence 75, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 75
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-75

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 69;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
             |||||||||| |||||||||
Db         20 AAGTATTTTCGTCCAGGCAA 1


RESULT 81
US-09-371-615A-3
; Sequence 3, Application US/09371615A
; Patent No. 6537781
; GENERAL INFORMATION:
```

```
;  APPLICANT: IDEXX LABORATORIES
;  TITLE OF INVENTION: METHODS AND COMPOSITIONS CONCERNING
;  TITLE OF INVENTION:  CANINE INTERLEUKIN 5
;  FILE REFERENCE: 03604001700US00
;  CURRENT APPLICATION NUMBER: US/09/371,615A
;  CURRENT FILING DATE:  1999-08-10
;  NUMBER OF SEQ ID NOS: 8
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 3
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Canis familiaris
;   FEATURE:
;   OTHER INFORMATION: PCR primer
US-09-371-615A-3

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 69;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        635 CATTGGTGAAAGAGACCTTG 654
              || ||||||||||||||||||
Db          1 CAGTGGTGAAAGAGACCTTG 20


RESULT 82
US-08-319-492B-703
; Sequence 703, Application US/08319492B
; Patent No. 5616488
;  GENERAL INFORMATION:
;    APPLICANT:  Sullivan, Sean M.
;    APPLICANT:  Draper, Kenneth G.
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Stinchcomb, Dan T.
;    TITLE OF INVENTION:  RIBOZYME TREATMENT OF DISEASES
;    TITLE OF INVENTION:  OR CONDITIONS RELATED TO LEVELS
;    TITLE OF INVENTION:  OF IL-5
;    NUMBER OF SEQUENCES:  751
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/319,492B
;      FILING DATE:  October 7, 1994
;    PRIOR APPLICATION DATA:
;    PRIOR APPLICATION DATA:  including application
;    PRIOR APPLICATION DATA:  described below:                Two
;      APPLICATION NUMBER:  08/008,895
;      FILING DATE:  January 19, 1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  703:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-319-492B-703

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   72.2%;  Pred. No. 67;
  Matches   13;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        588 TGGAGCTGCCTACGTGTA 605
              :|||||:|||:|||:|:|
Db          1 UGGAGCUGCCUACGUGUA 18


RESULT 83
US-08-319-492B-705
; Sequence 705, Application US/08319492B
; Patent No. 5616488
;  GENERAL INFORMATION:
;    APPLICANT:  Sullivan, Sean M.
;    APPLICANT:  Draper, Kenneth G.
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Stinchcomb, Dan T.
;    TITLE OF INVENTION:  RIBOZYME TREATMENT OF DISEASES
;    TITLE OF INVENTION:  OR CONDITIONS RELATED TO LEVELS
;    TITLE OF INVENTION:  OF IL-5
;    NUMBER OF SEQUENCES:  751
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/319,492B
;      FILING DATE:  October 7, 1994
;    PRIOR APPLICATION DATA:
;    PRIOR APPLICATION DATA:  including application
;    PRIOR APPLICATION DATA:  described below:                Two
;      APPLICATION NUMBER:  08/008,895
;      FILING DATE:  January 19, 1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  705:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-319-492B-705

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   61.1%;  Pred. No. 67;
  Matches   11;  Conservative    7;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        653 TGGCACTGCTTTCTACTC 670
              :|||||:||:::|:||:|
```

```
Db          1 UGGCACUGCUUUCUACUC 18


RESULT 84
US-08-319-492B-707
; Sequence 707, Application US/08319492B
; Patent No. 5616488
;  GENERAL INFORMATION:
;    APPLICANT:  Sullivan, Sean M.
;    APPLICANT:  Draper, Kenneth G.
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Stinchcomb, Dan T.
;    TITLE OF INVENTION:  RIBOZYME TREATMENT OF DISEASES
;    TITLE OF INVENTION:  OR CONDITIONS RELATED TO LEVELS
;    TITLE OF INVENTION:  OF IL-5
;    NUMBER OF SEQUENCES:  751
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/319,492B
;      FILING DATE:  October 7, 1994
;    PRIOR APPLICATION DATA:
;    PRIOR APPLICATION DATA:  including application
;    PRIOR APPLICATION DATA:  described below:                Two
;      APPLICATION NUMBER:  08/008,895
;      FILING DATE:  January 19, 1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  707:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-319-492B-707

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   77.8%;  Pred. No. 67;
  Matches   14;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 GAACTCTGCTGATAGCCA 691
              ||||:|:||:||:|||||
Db          1 GAACUCUGCUGAUAGCCA 18


RESULT 85
US-08-319-492B-709
; Sequence 709, Application US/08319492B
; Patent No. 5616488
;  GENERAL INFORMATION:
;    APPLICANT:  Sullivan, Sean M.
;    APPLICANT:  Draper, Kenneth G.
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Stinchcomb, Dan T.
;    TITLE OF INVENTION:  RIBOZYME TREATMENT OF DISEASES
;    TITLE OF INVENTION:  OR CONDITIONS RELATED TO LEVELS
;    TITLE OF INVENTION:  OF IL-5
;    NUMBER OF SEQUENCES:  751
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/319,492B
;      FILING DATE:  October 7, 1994
;    PRIOR APPLICATION DATA:
;    PRIOR APPLICATION DATA:  including application
;    PRIOR APPLICATION DATA:  described below:                Two
;      APPLICATION NUMBER:  08/008,895
;      FILING DATE:  January 19, 1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  209/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  709:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-319-492B-709

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   61.1%;  Pred. No. 67;
  Matches   11;  Conservative    7;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        913 GATTCCTGTTCCTGTACA 930
              ||::||:|::||:|:||| .
Db          1 GAUUCCUGUUCCUGUACA 18


RESULT 86
US-08-434-503-42
; Sequence 42, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
```

```
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  42:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-42

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   72.2%;  Pred. No. 67;
  Matches   13;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        596 CCTACGTGTATGCCATCC 613
              ||:|||:|:|:||||:||
Db          1 CCUACGUGUAUGCCAUCC 18


RESULT 87
US-08-434-503-54
; Sequence 54, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  54:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-54

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   66.7%;  Pred. No. 67;
  Matches   12;  Conservative    6;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2504 GAAATGGTTAAGAATTTG 2521
              ||||:||::|||||:::|
Db          1 GAAAUGGUUAAGAAUUUG 18


RESULT 88
US-08-434-503-51/c
; Sequence 51, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  51:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  33
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-51

  Query Match             0.6%;  Score 17.8;  DB 1;  Length 33;
  Best Local Similarity   75.9%;  Pred. No. 90;
  Matches   22;  Conservative    0;  Mismatches    7;  Indels    0;  Gaps    0;
```

```
Qy       2345 TTTCAGGCATACTGACACTTTGCCAGAAA 2373
              |||| |||| | || || | |||| ||||
Db         30 TTTCTGGCAAAGTGTCAGTATGCCTGAAA 2


RESULT 89
US-08-420-244-4
; Sequence 4, Application US/08420244
; Patent No. 5627195
;  GENERAL INFORMATION:
;    APPLICANT:  Hu, Shixing
;    TITLE OF INVENTION:  TREATMENT FOR OCULAR INFLAMMATION
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Fish & Richardson P.C.
;      STREET:  225 Franklin Street, Suite 3100
;      CITY:  Boston
;      STATE:  MA
;      COUNTRY:  USA
;      ZIP:  02110-2804
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/420,244
;      FILING DATE:  07-APR-1995
;      CLASSIFICATION:  514
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Tsao, Y. Rocky
;      REGISTRATION NUMBER:  34,053
;      REFERENCE/DOCKET NUMBER:  00633/021001
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (617) 542-5070
;      TELEFAX:  (617) 542-8906
;      TELEX:  200154
;  INFORMATION FOR SEQ ID NO:  4:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  19 bases
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
US-08-420-244-4

  Query Match             0.5%;  Score 17.4;  DB 1;  Length 19;
  Best Local Similarity   94.7%;  Pred. No. 75;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2167 TGCAAGAGTTTCTTGGTGT 2185
              |||||||||| ||||||||
Db          1 TGCAAGAGTTCCTTGGTGT 19


RESULT 90
US-09-259-411-5
; Sequence 5, Application US/09259411
; Patent No. 6489306
; GENERAL INFORMATION:
;  APPLICANT:  Mohapatra, Shyam S.
;  APPLICANT:  Matsuse, Hiroto
;  APPLICANT:  Behera, Aruna K.
;  APPLICANT:  Kumar, Mukesh
;  TITLE OF INVENTION:  METHOD OF INTRANASAL GENE TRANSFER FOR PROTECTION
;  TITLE OF INVENTION:  AGAINST RESPIRATORY INFECTION
;  FILE REFERENCE:  0152.00312
;  CURRENT APPLICATION NUMBER: US/09/259,411
;  CURRENT FILING DATE:  1999-02-23
;  PRIOR APPLICATION NUMBER:  60/075,588
;  PRIOR FILING DATE:  1998-02-23
;  NUMBER OF SEQ ID NOS:  8
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 5
;  LENGTH: 20
;  TYPE: DNA
;  ORGANISM: Artificial Sequence
;  FEATURE:
;  OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-259-411-5

  Query Match             0.5%;  Score 17.4;  DB 1;  Length 20;
  Best Local Similarity   94.7%;  Pred. No. 77;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        556 AGGATGCTTCTGCATTTGA 574
              |||||||||||||| ||||
Db          2 AGGATGCTTCTGCACTTGA 20


RESULT 91
US-08-434-503-39
; Sequence 39, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  39:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-39

  Query Match             0.5%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 73;
  Matches   14;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        518 CTTTGCCAAAGGCAAAC 534
              |:::|||||||||||||
Db          1 CUUUGCCAAAGGCAAAC 17
```

```
RESULT 92
US-09-280-799-16/c
; Sequence 16, Application US/09280799
; Patent No. 6136603
; GENERAL INFORMATION:
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Karras, James G
;  APPLICANT: McKay, Robert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF INTERLEUKIN-5 SIGNAL
;  TITLE OF INVENTION: TRANSDUCTION
;  FILE REFERENCE: ISPH-0340
;  CURRENT APPLICATION NUMBER: US/09/280,799
;  CURRENT FILING DATE: 1999-03-26
;  NUMBER OF SEQ ID NOS: 208
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 16
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:Synthetic
US-09-280-799-16

  Query Match             0.5%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 82;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2001 ACGGCCAAAAAGTAAGTTAC 2020
              || ||||||||||||||| |
Db         20 ACCGCCAAAAAGTAAGTTCC 1


RESULT 93
US-09-259-411-6/c
; Sequence 6, Application US/09259411
; Patent No. 6489306
; GENERAL INFORMATION:
;  APPLICANT:  Mohapatra, Shyam S.
;  APPLICANT:  Matsuse, Hiroto
;  APPLICANT:  Behera, Aruna K.
;  APPLICANT:  Kumar, Mukesh
;  TITLE OF INVENTION:  METHOD OF INTRANASAL GENE TRANSFER FOR PROTECTION
;  TITLE OF INVENTION:  AGAINST RESPIRATORY INFECTION
;  FILE REFERENCE:  0152.00312
;  CURRENT APPLICATION NUMBER: US/09/259,411
;  CURRENT FILING DATE:  1999-02-23
;  PRIOR APPLICATION NUMBER:  60/075,588
;  PRIOR FILING DATE:  1998-02-23
;  NUMBER OF SEQ ID NOS:  8
;  SOFTWARE:  PatentIn Ver. 2.1
; SEQ ID NO 6
;   LENGTH: 18
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-259-411-6

  Query Match             0.5%;  Score 16.4;  DB 1;  Length 18;
  Best Local Similarity   94.4%;  Pred. No. 81;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2168 GCAAGAGTTTCTTGGTGT 2185
              ||||||||| ||||||||
Db         18 GCAAGAGTTCCTTGGTGT 1


RESULT 94
US-08-358-171-14
; Sequence 14, Application US/08358171
; Patent No. 5763578
;  GENERAL INFORMATION:
;    APPLICANT:  FONG, Henry K.W.
;    TITLE OF INVENTION:  ALL TRANS-RETINALDEHYDE BINDING PROTEIN, DNA
;    TITLE OF INVENTION:  ENCODING SAME, AND ANTIBODIES THERETO
;    NUMBER OF SEQUENCES:  25
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BROWDY AND NEIMARK
;      STREET:  419 Seventh Street, N.W., Suite 300
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  USA
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/358,171
;      FILING DATE:  16-DEC-1994
;      CLASSIFICATION:  530
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  YUN, Allen C.
;      REGISTRATION NUMBER:  37,971
;      REFERENCE/DOCKET NUMBER:  FONG=2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-628-5197
;      TELEFAX:  202-737-3528
;      TELEX:  248633
;  INFORMATION FOR SEQ ID NO:  14:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  oligonucleotide
US-08-358-171-14

  Query Match             0.5%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 86;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2974 GCAGATCATCTCATTGCC 2991
              ||||| ||||||||||||
Db          1 GCAGACCATCTCATTGCC 18


RESULT 95
US-09-090-947-14
; Sequence 14, Application US/09090947
; Patent No. 6008338
;  GENERAL INFORMATION:
;    APPLICANT:  FONG, Henry K.W.
;    TITLE OF INVENTION:  ALL TRANS-RETINALDEHYDE BINDING PROTEIN, DNA
;    TITLE OF INVENTION:  ENCODING SAME, AND ANTIBODIES THERETO
;    NUMBER OF SEQUENCES:  25
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  BROWDY AND NEIMARK
;      STREET:  419 Seventh Street, N.W., Suite 300
;      CITY:  Washington
;      STATE:  D.C.
;      COUNTRY:  USA
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/090,947
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
```

```
;      APPLICATION NUMBER:  08/358,171
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  YUN, Allen C.
;      REGISTRATION NUMBER:  37,971
;      REFERENCE/DOCKET NUMBER:  FONG=2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  202-628-5197
;      TELEFAX:  202-737-3528
;      TELEX:  248633
;  INFORMATION FOR SEQ ID NO:  14:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  oligonucleotide
US-09-090-947-14

  Query Match             0.5%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 86;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2974 GCAGATCATCTCATTGCC 2991
                ||||| ||||||||||||
Db          1 GCAGACCATCTCATTGCC 18


RESULT 96
US-09-198-452A-5483/c
; Sequence 5483, Application US/09198452A
; Patent No. 6559294
; GENERAL INFORMATION:
;  APPLICANT: Griffais, R.
;  TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
;  TITLE OF INVENTION:  thereof and uses thereof, in particular for the diagnosis, preve
;  TITLE OF INVENTION:  and treatment of infection
;  FILE REFERENCE: 9710-003-999
;  CURRENT APPLICATION NUMBER: US/09/198,452A
;  CURRENT FILING DATE:  1998-11-24
;  NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 5483
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Chlamydia pneumoniae
US-09-198-452A-5483

  Query Match             0.5%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 86;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2936 TGTAACTAGGTTCCTGCC 2953
                || ||||||||||||||||
Db         18 TGCAACTAGGTTCCTGCC 1


RESULT 97
US-09-079-839-1/c
; Sequence 1, Application US/09079839
; Patent No. 6048726
; GENERAL INFORMATION:
;  APPLICANT: Weltman, Joel K.
;  APPLICANT: Karim, Aftab S.
;  TITLE OF INVENTION: INHIBITION OF EOSINOPHILIC INFLAMMATION
;  FILE REFERENCE: 09998/002001
;  CURRENT APPLICATION NUMBER: US/09/079,839
;  CURRENT FILING DATE: 1998-05-15
;  NUMBER OF SEQ ID NOS: 2
;  SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 1
;   LENGTH: 16
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-079-839-1

  Query Match             0.5%;  Score 16;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        561 GCTTCTGCATTTGAGT 576
                ||||||||||||||||
Db         16 GCTTCTGCATTTGAGT 1


RESULT 98
US-09-322-409-134
; Sequence 134, Application US/09322409
; Patent No. 6471957
; GENERAL INFORMATION:
;  APPLICANT: Sim, Gek-Kee
;  APPLICANT: Yang, Shumin
;  APPLICANT: Dreitz, Matthew J.
;  APPLICANT: Wonderling, Ramani S.
;  TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
;  TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
;  FILE REFERENCE: IM-2-C1
;  CURRENT APPLICATION NUMBER: US/09/322,409
;  CURRENT FILING DATE: 1999-05-28
;  EARLIER APPLICATION NUMBER: 60/087,306
;  EARLIER FILING DATE: 1998-05-29
;  NUMBER OF SEQ ID NOS: 154
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 134
;   LENGTH: 16
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
;   OTHER INFORMATION: Primer
US-09-322-409-134

  Query Match             0.5%;  Score 16;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCC 524
                ||||||||||||||||
Db          1 ATGCACTTTCTTTGCC 16


RESULT 99
US-09-451-527-134
; Sequence 134, Application US/09451527
; Patent No. 6482403
; GENERAL INFORMATION:
;  APPLICANT: Sim, Gek-Kee
;  APPLICANT: Yang, Shumin
;  APPLICANT: Dreitz, Matthew J.
;  APPLICANT: Wonderling, Ramani S.
;  TITLE OF INVENTION: CANINE AND FELINE IMMUNOREGULATORY PROTEINS, NUCLEIC
;  TITLE OF INVENTION: ACID MOLECULES, AND USES THEREOF
;  FILE REFERENCE: IM-2-C2
;  CURRENT APPLICATION NUMBER: US/09/451,527
;  CURRENT FILING DATE: 1999-12-01
;  EARLIER APPLICATION NUMBER: 09/322,409
;  EARLIER FILING DATE: 1999-05-28
;  EARLIER APPLICATION NUMBER: 60/087,306
;  EARLIER FILING DATE: 1998-05-29
;  NUMBER OF SEQ ID NOS: 174
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 134
;   LENGTH: 16
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Description of Artificial Sequence:  Synthetic
```

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;   OTHER INFORMATION: Primer
US-09-451-527-134

  Query Match             0.5%;  Score 16;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCC 524
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Db          1 ATGCACTTTCTTTGCC 16


RESULT 100
US-09-422-978-5006
; Sequence 5006, Application US/09422978
; Patent No. 6537751
; GENERAL INFORMATION:
;  APPLICANT: Cohen, Daniel
;  APPLICANT: Blumenfeld, Marta
;  APPLICANT: Chumakov, Ilya
;  TITLE OF INVENTION: Biallelic markers for use in constructing a high density...
;  FILE REFERENCE: GENSET.020CP1
;  CURRENT APPLICATION NUMBER: US/09/422,978
;  CURRENT FILING DATE: 1999-10-20
;  EARLIER APPLICATION NUMBER: US 09/298,850
;  EARLIER FILING DATE: 1999-04-21
;  EARLIER APPLICATION NUMBER: US 60/109,732
;  EARLIER FILING DATE: 1998-11-23
;  EARLIER APPLICATION NUMBER: US 60/082,614
;  EARLIER FILING DATE: 1998-04-21
;  NUMBER OF SEQ ID NOS: 11796
; SEQ ID NO 5006
;   LENGTH: 19
;   TYPE: DNA
;   ORGANISM: Homo Sapiens
;   FEATURE:
;   NAME/KEY: primer_bind
;   LOCATION: 1..19
;   OTHER INFORMATION: upstream amplification primer 99-2024 for SEQ 1072,
US-09-422-978-5006

  Query Match             0.5%;  Score 16;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 87;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1652 ACAAAAAACTCTTTGG 1667
              ||||||||||||||||
Db          4 ACAAAAAACTCTTTGG 19


RESULT 101
US-09-198-452A-5765/c
; Sequence 5765, Application US/09198452A
; Patent No. 6559294
; GENERAL INFORMATION:
;  APPLICANT: Griffais, R.
;  TITLE OF INVENTION: Chlamydia pneumoniae genomic sequence and polypeptides, fragments
;  TITLE OF INVENTION:  thereof and uses thereof, in particular for the diagnosis, preve
;  TITLE OF INVENTION:  and treatment of infection
;  FILE REFERENCE: 9710-003-999
;  CURRENT APPLICATION NUMBER: US/09/198,452A
;  CURRENT FILING DATE:  1998-11-24
;  NUMBER OF SEQ ID NOS: 6849
; SEQ ID NO 5765
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Chlamydia pneumoniae
US-09-198-452A-5765

  Query Match             0.5%;  Score 16;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 89;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2362 CTTTGCCAGAAAGCAT 2377
              ||||||||||||||||
Db         19 CTTTGCCAGAAAGCAT 4


RESULT 102
US-08-434-503-53/c
; Sequence 53, Application US/08434503
; Patent No. 5616490
;  GENERAL INFORMATION:
;    APPLICANT:  Sean M. Sullivan
;    APPLICANT:  Kenneth G. Draper
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR
;    TITLE OF INVENTION:  TREATMENT OF INFLAMMATORY
;    TITLE OF INVENTION:  DISEASE
;    NUMBER OF SEQUENCES:  54
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  611 West Sixth Street
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  90017
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM MS-DOS (Version 5.0)
;      SOFTWARE:  WordPerfect (Version 5.1)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/434,503
;      FILING DATE:  04-MAY-1995
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/008,895
;      FILING DATE:  19-JAN-1993
;      APPLICATION NUMBER:  07/989,849
;      FILING DATE:  December 7, 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  200/276
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  53:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  29
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-434-503-53

  Query Match             0.5%;  Score 16;  DB 1;  Length 29;
  Best Local Similarity   79.2%;  Pred. No. 1e+02;
  Matches   19;  Conservative    0;  Mismatches    5;  Indels    0;  Gaps    0;

Qy        354 AAAAGATAAAAGTAAATTTATTTT 377
              | |||| ||||||| ||  |||||
Db         25 ATAAGAAAAAAGTATATCAATTTT 2


RESULT 103
US-09-331-347C-5/c
; Sequence 5, Application US/09331347C
; Patent No. 6617431
; GENERAL INFORMATION:
;  APPLICANT: Meristem Therapeutics, S.A.
;  APPLICANT:  Meristem Therapeutics, S.A.
;  TITLE OF INVENTION: Recombinant Collagens and Derived Proteins Produced by Plants, Me
;  TITLE OF INVENTION:  obtaining Such and Their Uses
;  FILE REFERENCE: 1149-3
;  CURRENT APPLICATION NUMBER: US/09/331,347C
```

```
;  CURRENT FILING DATE:  1999-08-17
;  NUMBER OF SEQ ID NOS: 22
;  SOFTWARE: PatentIn version 3.1
; SEQ ID NO 5
;   LENGTH: 17
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: oligonucleotide BIOC7
US-09-331-347C-5

  Query Match          0.5%;  Score 15.4;  DB 1;  Length 17;
  Best Local Similarity   94.1%;  Pred. No. 87;
  Matches   16;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         59 TTCAATCACTGTCTTCC 75
              ||||||||||||||| |
Db         17 TTCAATCACTGTCTTGC 1


Search completed: December 14, 2004, 16:07:45
Job time : 3 secs
```

CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, CC in cells or tissues, for altering the ratio of the isoforms of mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC having a disease or condition associated with IL-5 signal transduction, CC IL-5 expression or IL-5 receptor a expression, where the disease or CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence CC is an antisense oligonucleotide targetting human IL5
XX
SQ Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2108 TTTTTCACAGAAAAAGTGTG 2127
||||||||||||||||||||
Db 20 TTTTTCACAGAAAAAGTGTG 1

RESULT 117
ABX04364/c
ID ABX04364 standard; DNA; 20 BP.
XX
AC ABX04364;
XX
DT 13-JAN-2003 (first entry)
XX
DE Human Interleukin 5 antisense oligonucleotide ISIS 16095.
XX
KW Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW immunosuppressant; eosinophilic syndrome; asthma.
XX
OS Homo sapiens.
XX
PN US2002128216-A1.
XX
PD 12-SEP-2002.
XX
PF 07-MAR-2001; 2001US-00800629.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Claim 4; Page 19; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (IL)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, CC in cells or tissues, for altering the ratio of the isoforms of mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC having a disease or condition associated with IL-5 signal transduction, CC IL-5 expression or IL-5 receptor a expression, where the disease or CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence CC is an antisense oligonucleotide targetting human IL5
XX
SQ Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2416 AAGTATTTTCCTCCAGGCAA 2435
||||||||||||||||||||
Db 20 AAGTATTTTCCTCCAGGCAA 1

RESULT 118
ABX04352/c
ID ABX04352 standard; DNA; 20 BP.
XX
AC ABX04352;
XX
DT 13-JAN-2003 (first entry)
XX
DE Human Interleukin 5 antisense oligonucleotide ISIS 16083.
XX
KW Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW immunosuppressant; eosinophilic syndrome; asthma.
XX
OS Homo sapiens.
XX
PN US2002128216-A1.
XX
PD 12-SEP-2002.
XX
PF 07-MAR-2001; 2001US-00800629.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Example 20; Page 19; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in CC length, which modulates interleukin (IL)-5 signal transduction. Also CC include are a pharmaceutical composition comprising the antisense CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and CC a diagnostic kit for detecting the expression level of the membrane form CC versus soluble form of IL-5 receptor a. The antisense compound is useful CC for modulating IL-5 signal transduction, modulating expression of CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a, CC in cells or tissues, for altering the ratio of the isoforms of mammalian CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian CC having a disease or condition associated with IL-5 signal transduction, CC IL-5 expression or IL-5 receptor a expression, where the disease or CC condition include eosinophilic syndrome or asthma. An antisense compound CC which alters splicing of an RNA encoding IL-5 receptor a is also useful CC for treating a mammal having a disease or condition. The present sequence CC is an antisense oligonucleotide targetting human IL5
XX

```
SQ   Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 119
ABX04361/c
ID   ABX04361 standard; DNA; 20 BP.
XX
AC   ABX04361;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16092.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 4 A; 8 C; 0 G; 8 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2241 AAGATTTTGGAGGAGAAGGA 2260
              ||||||||||||||||||||
Db         20 AAGATTTTGGAGGAGAAGGA 1


RESULT 120
ABX04368/c
ID   ABX04368 standard; DNA; 20 BP.
XX
AC   ABX04368;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16099.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1
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```
RESULT 121
ABX04345/c
ID   ABX04345 standard; DNA; 20 BP.
XX
AC   ABX04345;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16076.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 122
ABX04354/c
ID   ABX04354 standard; DNA; 20 BP.
XX
AC   ABX04354;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16085.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Claim 4; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1932 GTCAAACTGTGCAAGGGGGT 1951
              ||||||||||||||||||||
Db         20 GTCAAACTGTGCAAGGGGGT 1


RESULT 123
ABX04367/c
ID   ABX04367 standard; DNA; 20 BP.
XX
AC   ABX04367;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16098.
```

```
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 124
ABX04370/c
ID   ABX04370 standard; DNA; 20 BP.
XX
AC   ABX04370;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16101.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 125
ABX04346/c
ID   ABX04346 standard; DNA; 20 BP.
XX
AC   ABX04346;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16077.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
```

```
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        905 ACTCTGAGGATTCCTGTTCC 924
              ||||||||||||||||||||
Db         20 ACTCTGAGGATTCCTGTTCC 1


RESULT 126
ABX04357/c
ID   ABX04357 standard; DNA; 20 BP.
XX
AC   ABX04357;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16088.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2051 GCTGTGCCTATTTCTATGGA 2070
              ||||||||||||||||||||
Db         20 GCTGTGCCTATTTCTATGGA 1


RESULT 127
ABX04369/c
ID   ABX04369 standard; DNA; 20 BP.
XX
AC   ABX04369;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16100.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
```

```
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 5 A; 2 C; 1 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 128
ABX04341/c
ID   ABX04341 standard; DNA; 20 BP.
XX
AC   ABX04341;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16072.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 129
ABX04347/c
ID   ABX04347 standard; DNA; 20 BP.
XX
AC   ABX04347;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16078.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
```

```
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 5 A; 2 C; 1 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 130
ABX04351/c
ID   ABX04351 standard; DNA; 20 BP.
XX
AC   ABX04351;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16082.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 8 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1627 TGGTGGTTTGTTGCCTAGAA 1646
              ||||||||||||||||||||
Db         20 TGGTGGTTTGTTGCCTAGAA 1


RESULT 131
ABX04360/c
ID   ABX04360 standard; DNA; 20 BP.
XX
AC   ABX04360;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16091.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
```

```
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2186 AATGAACACCGAGTGGATAA 2205
              ||||||||||||||||||||
Db         20 AATGAACACCGAGTGGATAA 1


RESULT 132
ABX04363/c
ID   ABX04363 standard; DNA; 20 BP.
XX
AC   ABX04363;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16094.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
              ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 133
ABX04371/c
ID   ABX04371 standard; DNA; 20 BP.
XX
AC   ABX04371;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16102.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
```

```
  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
              ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 134
ABX04355/c
ID   ABX04355 standard; DNA; 20 BP.
XX
AC   ABX04355;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16086.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1988 AAGAAATACATTGACGGCCA 2007
              ||||||||||||||||||||
Db         20 AAGAAATACATTGACGGCCA 1


RESULT 135
ABX04359/c
ID   ABX04359 standard; DNA; 20 BP.
XX
AC   ABX04359;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16090.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 2 A; 5 C; 3 G; 10 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2135 AAGACGGAGAGTAAACCAAT 2154
              ||||||||||||||||||||
Db         20 AAGACGGAGAGTAAACCAAT 1


RESULT 136
```

```
ABX04356/c
ID   ABX04356 standard; DNA; 20 BP.
XX
AC   ABX04356;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16087.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
             ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 137
ABX04362/c
ID   ABX04362 standard; DNA; 20 BP.
XX
AC   ABX04362;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16093.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
             ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 138
ABX04343/c
ID   ABX04343 standard; DNA; 20 BP.
XX
AC   ABX04343;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16074.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
```

```
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 139
ABX04366/c
ID   ABX04366 standard; DNA; 20 BP.
XX
AC   ABX04366;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16097.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 140
ABX04340/c
ID   ABX04340 standard; DNA; 20 BP.
XX
AC   ABX04340;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16071.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
```

PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Example 20; Page 19; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in
CC length, which modulates interleukin (IL)-5 signal transduction. Also
CC include are a pharmaceutical composition comprising the antisense
CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC a diagnostic kit for detecting the expression level of the membrane form
CC versus soluble form of IL-5 receptor a. The antisense compound is useful
CC for modulating IL-5 signal transduction, modulating expression of
CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC in cells or tissues, for altering the ratio of the isoforms of mammalian
CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC having a disease or condition associated with IL-5 signal transduction,
CC IL-5 expression or IL-5 receptor a expression, where the disease or
CC condition include eosinophilic syndrome or asthma. An antisense compound
CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC for treating a mammal having a disease or condition. The present sequence
CC is an antisense oligonucleotide targetting human IL5
XX
SQ Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 509 ATGCACTTTCTTTGCCAAAG 528
||||||||||||||||||||
Db 20 ATGCACTTTCTTTGCCAAAG 1

RESULT 141
ABX04349/c
ID ABX04349 standard; DNA; 20 BP.
XX
AC ABX04349;
XX
DT 13-JAN-2003 (first entry)
XX
DE Human Interleukin 5 antisense oligonucleotide ISIS 16080.
XX
KW Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW immunosuppressant; eosinophilic syndrome; asthma.
XX
OS Homo sapiens.
XX
PN US2002128216-A1.
XX
PD 12-SEP-2002.
XX
PF 07-MAR-2001; 2001US-00800629.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Example 20; Page 19; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in
CC length, which modulates interleukin (IL)-5 signal transduction. Also
CC include are a pharmaceutical composition comprising the antisense
CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC a diagnostic kit for detecting the expression level of the membrane form
CC versus soluble form of IL-5 receptor a. The antisense compound is useful
CC for modulating IL-5 signal transduction, modulating expression of
CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC in cells or tissues, for altering the ratio of the isoforms of mammalian
CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC having a disease or condition associated with IL-5 signal transduction,
CC IL-5 expression or IL-5 receptor a expression, where the disease or
CC condition include eosinophilic syndrome or asthma. An antisense compound
CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC for treating a mammal having a disease or condition. The present sequence
CC is an antisense oligonucleotide targetting human IL5
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1161 TTCCCAAAGAGCATCGTGTC 1180
||||||||||||||||||||
Db 20 TTCCCAAAGAGCATCGTGTC 1

RESULT 142
ABX04350/c
ID ABX04350 standard; DNA; 20 BP.
XX
AC ABX04350;
XX
DT 13-JAN-2003 (first entry)
XX
DE Human Interleukin 5 antisense oligonucleotide ISIS 16081.
XX
KW Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW immunosuppressant; eosinophilic syndrome; asthma.
XX
OS Homo sapiens.
XX
PN US2002128216-A1.
XX
PD 12-SEP-2002.
XX
PF 07-MAR-2001; 2001US-00800629.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX

```
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 7 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1407 TGCCTGGTCATATTAAAATG 1426
             ||||||||||||||||||||
Db         20 TGCCTGGTCATATTAAAATG 1


RESULT 143
ABX04365/c
ID   ABX04365 standard; DNA; 20 BP.
XX
AC   ABX04365;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16096.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 144
ACF04469
ID   ACF04469 standard; DNA; 20 BP.
XX
AC   ACF04469;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Real time PCR targeting IL-5 PCR primer F83.
XX
KW   Nucleic acid level determination; PCR; primer; probe; DNA quantification;
KW   gene therapy; immunosuppressive; anti-HIV; antiarthritic;
KW   neuroprotective; cytostatic; antiallergic; ss.
XX
OS   Unidentified.
XX
PN   WO2003060119-A2.
XX
PD   24-JUL-2003.
XX
PF   20-JAN-2003; 2003WO-EP000493.
XX
PR   18-JAN-2002; 2002EP-00447009.
XX
PA   (ULBR ) UNIV LIBRE BRUXELLES.
XX
PI   Stordeur P,  Goldman M;
XX
DR   WPI; 2003-598531/56.
XX
PT   Quantifying in vivo RNA from a biological sample for producing a
PT   medicament for treating immune related disease by determining in vivo
PT   levels of transcripts using nucleic acid/reverse transcription-PCR
PT   reagent mix in an automated setup.
XX
PS   Disclosure; Page 42; 83pp; English.
XX
CC   The present invention relates to a method of quantifying in vivo RNA from
CC   a biological sample. This involves collecting the biological sample in a
CC   tube comprising a compound inhibiting RNA degradation and/or gene
CC   induction, forming a precipitate comprising nucleic acids, separating the
```

CC precipitate from the supernatant, dissolving the precipitate using a
CC buffer, forming a suspension, isolating nucleic acids from the suspension
CC using an automated device, dispersing or distributing a reagent mix for
CC reverse transcription (RT)-PCR using an automated device, dispersing or
CC distributing the nucleic acids isolated within the dispersed reagent mix
CC using an automated device and determining the in vivo levels of
CC transcripts using the nucleic acid and RT-PCR reagent mix of the previous
CC step in an automated setup. The method is useful for monitoring or
CC detecting changes in in vivo nucleic acids levels in a biological agent
CC present, such as eukaryotic or prokaryotic cells, viruses or phages in a
CC biological sample or for producing a medicament for treating immune
CC related disease, e.g., autoimmunity, rheumatoid arthritis, multiple
CC sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft
CC rejection or Graft versus Host Disease. The present sequence is a PCR
CC primer/probe used in the exemplification of the invention
XX
SQ Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 591 AGCTGCCTACGTGTATGCCA 610
||||||||||||||||||||
Db 1 AGCTGCCTACGTGTATGCCA 20

RESULT 145
ABZ95282/c
ID ABZ95282 standard; DNA; 20 BP.
XX
AC ABZ95282;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human IL-5 antisense fragment no.1146.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10524; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 0 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3064 AACAAAAGGACAGAGAGACA 3083
||||||||||||||||||||
Db 20 AACAAAAGGACAGAGAGACA 1

RESULT 146
ABD19256/c
ID ABD19256 standard; DNA; 20 BP.
XX
AC ABD19256;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human IL5 DNA fragment 1146.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 10524; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and

```
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 0 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3064 AACAAAAGGACAGAGAGACA 3083
              ||||||||||||||||||||
Db         20 AACAAAAGGACAGAGAGACA 1


RESULT 147
ADR12029/c
ID   ADR12029 standard; DNA; 20 BP.
XX
AC   ADR12029;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #13.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 51; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 148
ADR12040/c
ID   ADR12040 standard; DNA; 20 BP.
XX
AC   ADR12040;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #24.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
```

PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 62; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2352 CATACTGACACTTTGCCAGA 2371
||||||||||||||||||||
Db 20 CATACTGACACTTTGCCAGA 1

RESULT 149
ADR12019/c
ID ADR12019 standard; DNA; 20 BP.
XX
AC ADR12019;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #3.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 41; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 540 ACGTTTCAGAGCCATGAGGA 559
||||||||||||||||||||
Db 20 ACGTTTCAGAGCCATGAGGA 1

RESULT 150
ADR12025/c
ID ADR12025 standard; DNA; 20 BP.
XX
AC ADR12025;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #9.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.

XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 47; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 5 A; 5 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 964 TGATGGCATGAATAAGTAAA 983
||||||||||||||||||||
Db 20 TGATGGCATGAATAAGTAAA 1

RESULT 151
ADR12033/c
ID ADR12033 standard; DNA; 20 BP.
XX
AC ADR12033;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #17.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.

XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 55; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2002 CGGCCAAAAAGTAAGTTACA 2021
||||||||||||||||||||
Db 20 CGGCCAAAAAGTAAGTTACA 1

RESULT 152
ADR12034/c
ID ADR12034 standard; DNA; 20 BP.
XX
AC ADR12034;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #18.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.

```
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 56; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2051 GCTGTGCCTATTTCTATGGA 2070
             ||||||||||||||||||||
Db         20 GCTGTGCCTATTTCTATGGA 1


RESULT 153
ADR12021/c
ID   ADR12021 standard; DNA; 20 BP.
XX
AC   ADR12021;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #5.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 43; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 7 A; 7 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        857 TGAATGCTGGTGTGCTGTAA 876
              ||||||||||||||||||||
Db         20 TGAATGCTGGTGTGCTGTAA 1


RESULT 154
ADR12027/c
ID   ADR12027 standard; DNA; 20 BP.
XX
AC   ADR12027;
XX
```

```
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #11.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 49; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 7 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1407 TGCCTGGTCATATTAAAATG 1426
             ||||||||||||||||||||
Db         20 TGCCTGGTCATATTAAAATG 1

RESULT 155
ADR12031/c
ID   ADR12031 standard; DNA; 20 BP.
XX
AC   ADR12031;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #15.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 53; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1932 GTCAAACTGTGCAAGGGGGT 1951
             ||||||||||||||||||||
Db         20 GTCAAACTGTGCAAGGGGGT 1
```

RESULT 156
ADR12043/c
ID ADR12043 standard; DNA; 20 BP.
XX
AC ADR12043;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #27.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 65; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 523 CCAAAGGCAAACGCAGAACG 542
||||||||||||||||||||
Db 20 CCAAAGGCAAACGCAGAACG 1

RESULT 157
ADR12039/c
ID ADR12039 standard; DNA; 20 BP.
XX
AC ADR12039;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #23.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 61; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

```
  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
              ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 158
ADR12042/c
ID   ADR12042 standard; DNA; 20 BP.
XX
AC   ADR12042;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #26.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 64; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 159
ADR12041/c
ID   ADR12041 standard; DNA; 20 BP.
XX
AC   ADR12041;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #25.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 63; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
```

```
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
              ||||||||||||||||||||
Db         20 AAGTATTTTCCTCCAGGCAA 1


RESULT 160
ADR12020/c
ID   ADR12020 standard; DNA; 20 BP.
XX
AC   ADR12020;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #4.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 42; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 161
ADR12037/c
ID   ADR12037 standard; DNA; 20 BP.
XX
AC   ADR12037;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #21.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 59; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
```

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CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2186 AATGAACACCGAGTGGATAA 2205
              ||||||||||||||||||||
Db         20 AATGAACACCGAGTGGATAA 1


RESULT 162
ADR12044/c
ID   ADR12044 standard; DNA; 20 BP.
XX
AC   ADR12044;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #28.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 66; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 163
ADR12047/c
ID   ADR12047 standard; DNA; 20 BP.
XX
AC   ADR12047;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #31.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 69; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
```

```
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1

RESULT 164
ADR12048/c
ID   ADR12048 standard; DNA; 20 BP.
XX
AC   ADR12048;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #32.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 70; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
              ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1

RESULT 165
ADR12017/c
ID   ADR12017 standard; DNA; 20 BP.
XX
AC   ADR12017;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #1.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
```

```
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 39; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 166
ADR12024/c
ID   ADR12024 standard; DNA; 20 BP.
XX
AC   ADR12024;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #8.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 46; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 5 A; 2 C; 1 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 167
ADR12026/c
ID   ADR12026 standard; DNA; 20 BP.
XX
AC   ADR12026;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #10.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
```

PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 48; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1161 TTCCCAAAGAGCATCGTGTC 1180
||||||||||||||||||||
Db 20 TTCCCAAAGAGCATCGTGTC 1

RESULT 168
ADR12028/c
ID ADR12028 standard; DNA; 20 BP.
XX
AC ADR12028;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #12.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 50; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 8 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1627 TGGTGGTTTGTTGCCTAGAA 1646
||||||||||||||||||||
Db 20 TGGTGGTTTGTTGCCTAGAA 1

RESULT 169
ADR12038/c
ID ADR12038 standard; DNA; 20 BP.
XX
AC ADR12038;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #22.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX

PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 60; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 4 A; 8 C; 0 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2241 AAGATTTTGGAGGAGAAGGA 2260
||||||||||||||||||||
Db 20 AAGATTTTGGAGGAGAAGGA 1

RESULT 170
ADR12035/c
ID ADR12035 standard; DNA; 20 BP.
XX
AC ADR12035;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #19.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 57; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2108 TTTTTCACAGAAAAAGTGTG 2127
||||||||||||||||||||
Db 20 TTTTTCACAGAAAAAGTGTG 1

RESULT 171
ADR12036/c
ID ADR12036 standard; DNA; 20 BP.
XX
AC ADR12036;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #20.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;

```
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 58; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 2 A; 5 C; 3 G; 10 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2135 AAGACGGAGAGTAAACCAAT 2154
              ||||||||||||||||||||
Db         20 AAGACGGAGAGTAAACCAAT 1


RESULT 172
ADR12023/c
ID   ADR12023 standard; DNA; 20 BP.
XX
AC   ADR12023;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #7.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 45; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        905 ACTCTGAGGATTCCTGTTCC 924
              ||||||||||||||||||||
Db         20 ACTCTGAGGATTCCTGTTCC 1


RESULT 173
ADR12045/c
ID   ADR12045 standard; DNA; 20 BP.
```

XX
AC ADR12045;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #29.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 67; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 895 TCCTCTCCAGACTCTGAGGA 914
||||||||||||||||||||
Db 20 TCCTCTCCAGACTCTGAGGA 1

RESULT 174
ADR12049/c
ID ADR12049 standard; DNA; 20 BP.
XX
AC ADR12049;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #33.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 71; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1
```

RESULT 175
ADR12018/c
ID ADR12018 standard; DNA; 20 BP.
XX
AC ADR12018;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #2.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 40; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;

```
  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1
```

RESULT 176
ADR12022/c
ID ADR12022 standard; DNA; 20 BP.
XX
AC ADR12022;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #6.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 20; SEQ ID NO 44; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a human IL-5 DNA antisense

```
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 177
ADR12030/c
ID   ADR12030 standard; DNA; 20 BP.
XX
AC   ADR12030;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #14.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 52; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1884 ACCAACTGTGCACTGAAGAA 1903
              ||||||||||||||||||||
Db         20 ACCAACTGTGCACTGAAGAA 1


RESULT 178
ADR12032/c
ID   ADR12032 standard; DNA; 20 BP.
XX
AC   ADR12032;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #16.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 54; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
```

```
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1988 AAGAAATACATTGACGGCCA 2007
              ||||||||||||||||||||
Db         20 AAGAAATACATTGACGGCCA 1


RESULT 179
ADR12046/c
ID   ADR12046 standard; DNA; 20 BP.
XX
AC   ADR12046;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #30.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 68; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 5 A; 2 C; 1 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 180
AAH48099/c
ID   AAH48099 standard; DNA; 24 BP.
XX
AC   AAH48099;
XX
DT   19-SEP-2001  (first entry)
XX
DE   Phytochrome 10 PCR primer #2.
XX
KW   Phytochrome 10; cytostatic; anti-HIV; haemopathic; immunomodulatory;
KW   malignant tumour; haemopathy; HIV infection; immunological disease;
KW   inflammation; PCR primer; ss.
XX
OS   Unidentified.
XX
PN   WO200148005-A1.
XX
PD   05-JUL-2001.
XX
PF   25-DEC-2000; 2000WO-CN000705.
XX
PR   27-DEC-1999;   99CN-00125383.
XX
PA   (SHAN-) SHANGHAI BIOWINDOW GENE DEV INC.
XX
PI   Mao Y,  Xie Y;
XX
DR   WPI; 2001-418238/44.
XX
PT   Phytochrome 10 and encoded polynucleotide, applicable in diagnosis and
PT   treatment of malignant tumor, hemopathy, HIV infection, immunological
PT   diseases and various inflammation.
XX
PS   Example 3; Page 16; 36pp; Chinese.
XX
CC   The present invention relates to phytochrome 10 and its coding sequence
CC   (see AAH48097 and AAG64233). The phytochrome and its coding sequence are
CC   useful in the diagnosis and treatment of malignant tumour, haemopathy,
CC   HIV infection, immunological diseases and various inflammations. The
CC   present sequence is a PCR primer, which was used in an example from the
CC   present invention
XX
SQ   Sequence 24 BP; 2 A; 11 C; 2 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 19.8;  DB 1;  Length 24;
  Best Local Similarity   91.3%;  Pred. No. 1.3e+02;
  Matches   21;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
```

```
Qy       2757 GGGATGTGGGGAGCAGGGACACA 2779
              |||||||||||||| || ||||||
Db         24 GGGATGTGGGGAGAAGAGACACA 2
```

RESULT 181
ABZ03720/c
ID ABZ03720 standard; DNA; 50 BP.
XX
AC ABZ03720;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 3711.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX
PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertermous T, Johnson F;
XX
DR WPI; 2002-636525/68.
XX
PT New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT or congestive heart failure, comprises diagnostic oligonucleotides.
XX
PS Claim 1; Page 445; 0pp; English.
XX
CC The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a
CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;

```
  Query Match             0.6%;  Score 19.2;  DB 1;  Length 50;
  Best Local Similarity   67.5%;  Pred. No. 1.8e+02;
  Matches   27;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy       2345 TTTCAGGCATACTGACACTTTGCCAGAAAGCATAAAATTC 2384
              |||| |||| | || || | |||| ||||    | |  |||
Db         47 TTTCTGGCAAAGTGTCAGTATGCCTGAAATATTTACTTTC 8
```

RESULT 182
ABZ02014/c
ID ABZ02014 standard; DNA; 50 BP.
XX
AC ABZ02014;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 2005.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX
PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertermous T, Johnson F;
XX
DR WPI; 2002-636525/68.
XX
PT New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT or congestive heart failure, comprises diagnostic oligonucleotides.
XX
PS Claim 1; Page 390; 0pp; English.
XX
CC The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a
CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;

```
  Query Match             0.6%;  Score 19.2;  DB 1;  Length 50;
  Best Local Similarity   67.5%;  Pred. No. 1.8e+02;
  Matches   27;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy       2345 TTTCAGGCATACTGACACTTTGCCAGAAAGCATAAAATTC 2384
              |||| |||| | || || | |||| ||||    | |  |||
Db         47 TTTCTGGCAAAGTGTCAGTATGCCTGAAATATTTACTTTC 8
```

RESULT 183
ADG33606/c
ID ADG33606 standard; DNA; 50 BP.
XX
AC ADG33606;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human DNA probe used to monitor expression of diagnostic genes SeqID930.
XX
KW human; ss; autoimmune; chronic inflammatory disease; SLE;
KW systemic lupus erythematosis; rheumatoid arthritis; cholecystitis;
KW Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondylitis;
KW ulcerative colitis; primary sclerosing cholangitis; appendicitis;

KW diverticulitis; primary biliary sclerosis; probe.
XX
OS Homo sapiens.
XX
PN WO2003090694-A2.
XX
PD 06-NOV-2003.
XX
PF 24-APR-2003; 2003WO-US013015.
XX
PR 24-APR-2002; 2002US-00131827.
XX
PA (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
PI Wohlgemuth J, Fry K, Woodward R, Ly N;
XX
DR WPI; 2003-877243/81.
XX
PT Diagnosing or monitoring autoimmune and chronic inflammatory diseases,
PT such as rheumatoid arthritis, systemic lupus erythematosus, ulcerative
PT colitis, psoriasis and asthma by detecting the expression level of one or
PT more genes.
XX
PS Claim 1; SEQ ID NO 930; 877pp; English.
XX
CC This invention relates to novel methods for diagnosing and monitoring
CC autoimmune and chronic inflammatory diseases. Specifically, it refers to
CC the identification of genes that have a clinical utility as diagnostic
CC tools for the management of, in particular, patients with systemic lupus
CC erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the
CC present invention describes a method for determining the levels of
CC multiple differentially expressed genes of a patient, in a concerted
CC manner, in order to achieve an improved diagnostic assay with sensitivity
CC and specificity for the disease in question. As such, these genes are
CC useful for the diagnosis of various other inflammatory disorders
CC including cholecystitis, Sjogren's disease, CREST syndrome, scleroderma,
CC ankylosing spondylitis, ulcerative colitis, primary sclerosing
CC cholangitis, appendicitis, diverticulitis, and primary biliary sclerosis.
CC This oligonucleotide is a human DNA probe used to monitor the expression
CC level of the differentially expressed diagnostic genes of the invention.
XX
SQ Sequence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;

Query Match 0.6%; Score 19.2; DB 1; Length 50;
Best Local Similarity 67.5%; Pred. No. 1.8e+02;
Matches 27; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

Qy 2345 TTTCAGGCATACTGACACTTTGCCAGAAAGCATAAAATTC 2384
||||||||||||||||||||||||||||||||||||||||
Db 47 TTTCTGGCAAAGTGTCAGTATGCCTGAAATATTTACTTTC 8

RESULT 184
AAT76223/c
ID AAT76223 standard; DNA; 19 BP.
XX
AC AAT76223;
XX
DT 12-SEP-1997 (first entry)
XX
DE Human IL5 antisense oligonucleotide HUMIL5AS4.
XX
KW Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS Synthetic.
XX
PN WO9640162-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US009306.
XX
PR 07-JUN-1995; 95US-00474497.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW, Metzger WJ;
XX
DR WPI; 1997-051871/05.
XX
PT Treatment of airway diseases such as asthma - by topically applying
PT adenosine-free antisense oligo:nucleotide to airway epithelium of
PT subject.
XX
PS Claim 5; Page 31; 71pp; English.
XX
CC A method for treating airway disease in a subject has been produced,
CC which involves the topical administration of an essentially adenosine
CC free antisense oligonucleotide (ON) to the airway epithelium of the
CC subject. The present sequence is an antisense oligonucleotide HUMIL5AS4
CC specific for the human IL5. The method can be used to treat airway
CC diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC disease, bronchitis and other airway diseases characterised by an
CC inflammatory response. By eliminating adenosine from the antisense ON,
CC its liberation upon antisense degradation is prevented, thereby
CC preventing adenosine-induced bronchoconstriction in patients with hyper-
CC reactive airways
XX
SQ Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2127 GGAGAAGAAAGACGGAGAG 2145
|||||||||||||||||||
Db 19 GGAGAAGAAAGACGGAGAG 1

RESULT 185
AAX54019/c
ID AAX54019 standard; DNA; 19 BP.
XX
AC AAX54019;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human IL-5 antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX

```
DR   WPI; 1999-229400/19.
XX
PT   New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT   vasoconstriction.
XX
PS   Disclosure; Page 49; 120pp; English.
XX
CC   The specification describes antisense oligonucleotides (AAX52869-X55271)
CC   directed against at least 2 mRNAs selected from target genes, coding and
CC   non-coding regions of RNAs corresponding to target genes, gene initiation
CC   codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC   -end and the juxta-section between coding and non-coding regions and all
CC   segments of RNAs encoding proteins associated with one or more diseases,
CC   conditions or mixtures. The antisense oligonucleotides may be derived
CC   from sequences AAX55272-74. These multiple target oligonucleotides
CC   (specifically AAX55180-271) can be used for the antisense treatment of
CC   diseases and conditions. Typical diseases and conditions are those
CC   associated with impaired respiration and inflammation, including lung
CC   diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC   acute asthma, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC   pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC   disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC   colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC   hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC   well as all types of cancers which may metastasize or have metastasized
CC   to the lungs, including breast and prostate cancer
XX
SQ   Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 19;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+02;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2127 GGAGAAGAAAGACGGAGAG 2145
              ||||||||||||||||||||
Db         19 GGAGAAGAAAGACGGAGAG 1


RESULT 186
AAA33463/c
ID   AAA33463 standard; DNA; 19 BP.
XX
AC   AAA33463;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1152.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Claim 18; Page 409; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 19;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 1.2e+02;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2127 GGAGAAGAAAGACGGAGAG 2145
              ||||||||||||||||||||
Db         19 GGAGAAGAAAGACGGAGAG 1


RESULT 187
AAF19585/c
ID   AAF19585 standard; DNA; 19 BP.
XX
AC   AAF19585;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human IL5 polynucleotide fragment #1152.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
```

XX
PR 06-APR-1999; 99US-0127958P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
PI Nyce JW;
XX
DR WPI; 2000-679539/66.
XX
PT Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
PS Claim 14; Page 208; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2127 GGAGAAGAAAGACGGAGAG 2145
||||||||||||||||||||
Db 19 GGAGAAGAAAGACGGAGAG 1

RESULT 188
ABZ95279/c
ID ABZ95279 standard; DNA; 19 BP.
XX
AC ABZ95279;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human IL-5 antisense fragment no.1143.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10521; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2127 GGAGAAGAAAGACGGAGAG 2145
||||||||||||||||||||
Db 19 GGAGAAGAAAGACGGAGAG 1

RESULT 189
ABD19253/c
ID ABD19253 standard; DNA; 19 BP.
XX
AC ABD19253;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human IL5 DNA fragment 1143.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;

KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 10521; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 19; DB 1; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2127 GGAGAAGAAAGACGGAGAG 2145
||||||||||||||||||||
Db 19 GGAGAAGAAAGACGGAGAG 1

RESULT 190
AAF74302/c
ID AAF74302 standard; DNA; 22 BP.
XX
AC AAF74302;
XX
DT 04-MAY-2001 (first entry)
XX
DE Canine interleukin-5 coding sequence PCR primer #2.
XX
KW Dog; interleukin-5; IL-5; allergy; cancer; gene therapy;
KW inflammatory reaction; PCR primer; ss.
XX
OS Bos taurus.
OS Mus sp.
OS Homo sapiens.
XX
PN WO200111049-A2.
XX
PD 15-FEB-2001.
XX
PF 09-AUG-2000; 2000WO-US021651.
XX
PR 10-AUG-1999; 99US-00371615.
XX
PA (IDEX-) IDEXX LAB INC.
XX
PI Guo H, Lawton R, Mermer B, Aiyappa AP;
XX
DR WPI; 2001-191542/19.
XX
PT Novel canine interleukin 5 polynucleotide and polypeptides are used for
PT generating antibodies which are useful in treating allergies in dogs.
XX
PS Disclosure; Page 47; 48pp; English.
XX
CC The present invention provides the protein and coding sequences of the
CC canine interleukin-5 (IL-5) protein. This can be used to treat allergies,
CC cancer and inflammatory reactions in dogs. The present sequence is a PCR
CC primer used to obtain the sequences of the invention
XX
SQ Sequence 22 BP; 4 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 18.8; DB 1; Length 22;
Best Local Similarity 90.9%; Pred. No. 1.4e+02;
Matches 20; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2196 GAGTGGATAATAGAAAGTTGAG 2217
||||||| ||| ||||||||||
Db 22 GAGTGGACAATGGAAAGTTGAG 1

RESULT 191
AAC73662/c
ID AAC73662 standard; DNA; 20 BP.
XX
AC AAC73662;
XX
DT 02-FEB-2001 (first entry)
XX
DE Murine IL-5 antisense oligonucleotide ISIS #16988.
XX
KW Mouse; interleukin-5; IL-5; signal transduction;
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW inflammation; cancer; ss.
XX
OS Mus musculus.
OS Synthetic.
XX
PN WO200058512-A1.
XX
PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.

```
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 2; Page 48; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.4e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1986 TAAAGAAATACATTGACGGC 2005
              |||||||||||||||||  ||
Db         20 TAAAGAAATACATTGACCGC 1


RESULT 192
AAC73722/c
ID   AAC73722 standard; DNA; 20 BP.
XX
AC   AAC73722;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #17989.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.4e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
              |||||||||| |||||||||
Db         20 AAGTATTTTCGTCCAGGCAA 1


RESULT 193
AAC73719/c
ID   AAC73719 standard; DNA; 20 BP.
XX
AC   AAC73719;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #17986.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.4e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
              |||||||||| |||||||||
Db         20 CATACTGACAGTTTGCCAGA 1
```

```
RESULT 194
AAF74301
ID   AAF74301 standard; DNA; 20 BP.
XX
AC   AAF74301;
XX
DT   04-MAY-2001  (first entry)
XX
DE   Canine interleukin-5 coding sequence PCR primer #1.
XX
KW   Dog; interleukin-5; IL-5; allergy; cancer; gene therapy;
KW   inflammatory reaction; PCR primer; ss.
XX
OS   Bos taurus.
OS   Mus sp.
OS   Homo sapiens.
XX
PN   WO200111049-A2.
XX
PD   15-FEB-2001.
XX
PF   09-AUG-2000; 2000WO-US021651.
XX
PR   10-AUG-1999;   99US-00371615.
XX
PA   (IDEX-) IDEXX LAB INC.
XX
PI   Guo H,  Lawton R,  Mermer B,  Aiyappa AP;
XX
DR   WPI; 2001-191542/19.
XX
PT   Novel canine interleukin 5 polynucleotide and polypeptides are used for
PT   generating antibodies which are useful in treating allergies in dogs.
XX
PS   Disclosure; Page 47; 48pp; English.
XX
CC   The present invention provides the protein and coding sequences of the
CC   canine interleukin-5 (IL-5) protein. This can be used to treat allergies,
CC   cancer and inflammatory reactions in dogs. The present sequence is a PCR
CC   primer used to obtain the sequences of the invention
XX
SQ   Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.4e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        635 CATTGGTGAAAGAGACCTTG 654
              || ||||||||||||||||||
Db          1 CAGTGGTGAAAGAGACCTTG 20


RESULT 195
ABX04376/c
ID   ABX04376 standard; DNA; 20 BP.
XX
AC   ABX04376;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 17989.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.4e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
              |||||||||| |||||||||
Db         20 AAGTATTTTCGTCCAGGCAA 1


RESULT 196
ABX04373/c
ID   ABX04373 standard; DNA; 20 BP.
XX
AC   ABX04373;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 17986.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
```

PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Example 20; Page 19; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in
CC length, which modulates interleukin (IL)-5 signal transduction. Also
CC include are a pharmaceutical composition comprising the antisense
CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC a diagnostic kit for detecting the expression level of the membrane form
CC versus soluble form of IL-5 receptor a. The antisense compound is useful
CC for modulating IL-5 signal transduction, modulating expression of
CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC in cells or tissues, for altering the ratio of the isoforms of mammalian
CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC having a disease or condition associated with IL-5 signal transduction,
CC IL-5 expression or IL-5 receptor a expression, where the disease or
CC condition include eosinophilic syndrome or asthma. An antisense compound
CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC for treating a mammal having a disease or condition. The present sequence
CC is an antisense oligonucleotide targetting human IL5
XX
SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2352 CATACTGACACTTTGCCAGA 2371
||||||||| |||||||||
Db 20 CATACTGACAGTTTGCCAGA 1

RESULT 197
ABX04316/c
ID ABX04316 standard; DNA; 20 BP.
XX
AC ABX04316;
XX
DT 13-JAN-2003 (first entry)
XX
DE Mouse Interleukin 5 antisense oligonucleotide ISIS 16988.
XX
KW Mouse; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW immunosuppressant; eosinophilic syndrome; asthma.
XX
OS Mus musculus.
XX
PN US2002128216-A1.
XX
PD 12-SEP-2002.
XX
PF 07-MAR-2001; 2001US-00800629.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Example 10; Page 14; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in
CC length, which modulates interleukin (IL)-5 signal transduction. Also
CC include are a pharmaceutical composition comprising the antisense
CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC a diagnostic kit for detecting the expression level of the membrane form
CC versus soluble form of IL-5 receptor a. The antisense compound is useful
CC for modulating IL-5 signal transduction, modulating expression of
CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC in cells or tissues, for altering the ratio of the isoforms of mammalian
CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC having a disease or condition associated with IL-5 signal transduction,
CC IL-5 expression or IL-5 receptor a expression, where the disease or
CC condition include eosinophilic syndrome or asthma. An antisense compound
CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC for treating a mammal having a disease or condition. The present sequence
CC is an antisense oligonucleotide targetting mouse IL5
XX
SQ Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 18.4; DB 1; Length 20;
Best Local Similarity 95.0%; Pred. No. 1.4e+02;
Matches 19; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1986 TAAAGAAATACATTGACGGC 2005
|||||||||||||||||| ||
Db 20 TAAAGAAATACATTGACCGC 1

RESULT 198
ADR12050/c
ID ADR12050 standard; DNA; 20 BP.
XX
AC ADR12050;
XX
DT 23-SEP-2004 (first entry)
XX
DE Human interleukin-5 (IL-5) DNA antisense oligonucleotide #34.
XX
KW Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Homo sapiens.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX

```
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 72; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.4e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
                ||||||||||  |||||||||
Db         20 CATACTGACAGTTTGCCAGA 1


RESULT 199
ADR11993/c
ID   ADR11993 standard; DNA; 20 BP.
XX
AC   ADR11993;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Murine interleukin-5 (IL-5) DNA antisense oligonucleotide #14.
XX
KW   Mouse; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Mus musculus.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM; Karras JG, Mckay R, Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 10; SEQ ID NO 15; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a murine IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.4e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1986 TAAAGAAATACATTGACGGC 2005
                ||||||||||||||||  ||
Db         20 TAAAGAAATACATTGACCGC 1


RESULT 200
ADR12053/c
ID   ADR12053 standard; DNA; 20 BP.
XX
AC   ADR12053;
XX
DT   23-SEP-2004  (first entry)
XX
DE   Human interleukin-5 (IL-5) DNA antisense oligonucleotide #37.
XX
KW   Human; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW   IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW   5-methylcytosine; IL-5 signal transduction; apoptosis;
KW   eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2004121376-A1.
XX
PD   24-JUN-2004.
XX
PF   06-OCT-2003; 2003US-00679532.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
PR   07-MAR-2001; 2001US-00800629.
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XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2004-479669/45.
XX
PT   New antisense compound modulating interleukin-5 signal transduction,
PT   useful in promoting apoptosis and in treating eosinophilic syndrome or
PT   asthma.
XX
PS   Example 20; SEQ ID NO 75; 77pp; English.
XX
CC   The invention relates to an antisense compound that modulates interleukin
CC   -5 (IL-5) signal transduction. The antisense compound is an antisense
CC   oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC   IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC   expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC   oligonucleotide comprises at least one modified internucleoside linkage,
CC   i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC   modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC   least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC   of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC   tissues comprises contacting the cells or tissues with an antisense
CC   compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC   altered. Treating a mammal having a disease or condition associated with
CC   IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC   disease or condition characterised by a reduction in apoptosis comprises
CC   administering to the mammal a therapeutic or prophylactic amount of an
CC   antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC   receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC   receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC   is modulated. The antisense compounds, methods and compositions are
CC   useful in promoting apoptosis and in treating eosinophilic syndrome and
CC   asthma. This sequence represents a human IL-5 DNA antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 6 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.4e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
              |||||||||| |||||||||
Db         20 AAGTATTTTCGTCCAGGCAA 1


RESULT 201
AAQ57192
ID   AAQ57192 standard; mRNA; 18 BP.
XX
AC   AAQ57192;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Enzymatic RNA molecule IL-5 mRNA target sequence.
XX
KW   Interleukin-5; specific; cleavage; target RNA; protein; expression;
KW   inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention;
KW   psoriasis; asthma; inflammatory diseases; restenosis;
KW   cardiovascular condition; hypertension; arthritis; ss.
XX
OS   Synthetic.
XX
PN   WO9402595-A1.
XX
PD   03-FEB-1994.
XX
PF   02-JUL-1993;   93WO-US006316.
XX
PR   17-JUL-1992;   92US-00916763.
PR   07-DEC-1992;   92US-00987132.
PR   07-DEC-1992;   92US-00989848.
PR   07-DEC-1992;   92US-00989849.
PR   19-JAN-1993;   93US-00008895.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Sullivan SM,  Draper KG;
XX
DR   WPI; 1994-048853/06.
XX
PT   Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT   inflammatory, arthritic, stenotic or cardiovascular diseases or
PT   conditions.
XX
PS   Claim 3; Page 17; 65pp; English.
XX
CC   This is an IL-5 mRNA target sequence (nucleotide no. 88) of an enzymatic
CC   RNA molecule (ribozyme) which cleaves mRNA associated with the
CC   development or maintenance of a psoriatic or asthmatic condition. The
CC   concn. of the ribozyme necessary to effect a therapeutic treatment is
CC   lower than that of an antisense oligonucleotide and the specificity of
CC   action is higher. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 18 BP; 3 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        596 CCTACGTGTATGCCATCC 613
              ||||||||||||||||||
Db          1 CCTACGTGTATGCCATCC 18


RESULT 202
AAT54734
ID   AAT54734 standard; RNA; 18 BP.
XX
AC   AAT54734;
XX
DT   25-MAR-2003  (revised)
DT   22-APR-1997  (first entry)
XX
DE   Human IL-5 hammerhead ribozyme target sequence (nt. position 203).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
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PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 222; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
CC   5) mRNA at the nucleotide base position indicated in the DE line. Regions
CC   of the mRNA that do not form secondary folding structures and that
CC   contain potential hammerhead and hairpin ribozyme cleavage sites were
CC   identified by computer analysis. Ribozymes directed against these mRNA
CC   sequences were designed and synthesised with modifications that improve
CC   their nuclease resistance. The ribozymes cleave the IL-5 target sequences
CC   and thereby inhibit IL-5 expression, making them useful for treating
CC   chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
CC   and preventing the recruitment and activation of eosinophils. The
CC   ribozymes can also be used to treat eosinophilia (related to parasitic
CC   infection or with pulmonary infiltration) and L-tryptophan-associated
CC   eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
CC   field.)
XX
SQ   Sequence 18 BP; 3 A; 5 C; 3 G; 0 T; 7 U; 0 Other;

  Query Match              0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   61.1%;  Pred. No. 1.3e+02;
  Matches   11;  Conservative    7;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        913 GATTCCTGTTCCTGTACA 930
              ||::||:|::||:|:|||
Db          1 GAUUCCUGUUCCUGUACA 18


RESULT 203
AAT54731
ID   AAT54731 standard; RNA; 18 BP.
XX
AC   AAT54731;
XX
DT   25-MAR-2003  (revised)
DT   22-APR-1997  (first entry)
XX
DE   Human IL-5 hammerhead ribozyme target sequence (nt. position 86).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 222; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
CC   5) mRNA at the nucleotide base position indicated in the DE line. Regions
CC   of the mRNA that do not form secondary folding structures and that
CC   contain potential hammerhead and hairpin ribozyme cleavage sites were
CC   identified by computer analysis. Ribozymes directed against these mRNA
CC   sequences were designed and synthesised with modifications that improve
CC   their nuclease resistance. The ribozymes cleave the IL-5 target sequences
CC   and thereby inhibit IL-5 expression, making them useful for treating
CC   chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
```

```
CC   and preventing the recruitment and activation of eosinophils. The
CC   ribozymes can also be used to treat eosinophilia (related to parasitic
CC   infection or with pulmonary infiltration) and L-tryptophan-associated
CC   eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
CC   field.)
XX
SQ   Sequence 18 BP; 3 A; 4 C; 6 G; 0 T; 5 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   72.2%;  Pred. No. 1.3e+02;
  Matches   13;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        588 TGGAGCTGCCTACGTGTA 605
              :|||||:|||:|||:|:|
Db          1 UGGAGCUGCCUACGUGUA 18


RESULT 204
AAT54732
ID   AAT54732 standard; RNA; 18 BP.
XX
AC   AAT54732;
XX
DT   25-MAR-2003  (revised)
DT   22-APR-1997  (first entry)
XX
DE   Human IL-5 hammerhead ribozyme target sequence (nt. position 151).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 222; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
CC   5) mRNA at the nucleotide base position indicated in the DE line. Regions
CC   of the mRNA that do not form secondary folding structures and that
CC   contain potential hammerhead and hairpin ribozyme cleavage sites were
CC   identified by computer analysis. Ribozymes directed against these mRNA
CC   sequences were designed and synthesised with modifications that improve
CC   their nuclease resistance. The ribozymes cleave the IL-5 target sequences
CC   and thereby inhibit IL-5 expression, making them useful for treating
CC   chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
CC   and preventing the recruitment and activation of eosinophils. The
CC   ribozymes can also be used to treat eosinophilia (related to parasitic
CC   infection or with pulmonary infiltration) and L-tryptophan-associated
CC   eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
CC   field.)
XX
SQ   Sequence 18 BP; 2 A; 6 C; 3 G; 0 T; 7 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   61.1%;  Pred. No. 1.3e+02;
  Matches   11;  Conservative    7;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        653 TGGCACTGCTTTCTACTC 670
              :|||||:||:::|:||:|
Db          1 UGGCACUGCUUUCUACUC 18


RESULT 205
AAT54733
ID   AAT54733 standard; RNA; 18 BP.
XX
AC   AAT54733;
XX
DT   25-MAR-2003  (revised)
DT   22-APR-1997  (first entry)
XX
DE   Human IL-5 hammerhead ribozyme target sequence (nt. position 172).
XX
KW   Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
KW   gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
KW   intercellular adhesion molecule; rel A; tumour necrosis factor;
KW   TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
KW   translocation; chronic myelogenous leukaemia; CML; cancer;
KW   Philadelphia chromosome; inflammation; autoimmune disease;
KW   atherosclerosis; myocardial infarction; stroke; restenosis;
KW   transplant rejection; rheumatoid arthritis; psoriasis;
KW   myocardial ischaemia; Kawasaki disease; septic shock; HIV;
KW   human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO9523225-A2.
XX
PD   31-AUG-1995.
XX
PF   23-FEB-1995;   95WO-IB000156.
```

```
XX
PR   23-FEB-1994;   94US-00201109.
PR   29-MAR-1994;   94US-00218934.
PR   04-APR-1994;   94US-00222795.
PR   07-APR-1994;   94US-00224483.
PR   15-APR-1994;   94US-00227958.
PR   15-APR-1994;   94US-00228041.
PR   18-MAY-1994;   94US-00245736.
PR   06-JUL-1994;   94US-00271280.
PR   15-AUG-1994;   94US-00291932.
PR   16-AUG-1994;   94US-00291433.
PR   17-AUG-1994;   94US-00292620.
PR   19-AUG-1994;   94US-00293520.
PR   02-SEP-1994;   94US-00300000.
PR   08-SEP-1994;   94US-00303039.
PR   23-SEP-1994;   94US-00311486.
PR   23-SEP-1994;   94US-00311749.
PR   28-SEP-1994;   94US-00314397.
PR   03-OCT-1994;   94US-00316771.
PR   07-OCT-1994;   94US-00319492.
PR   11-OCT-1994;   94US-00321993.
PR   04-NOV-1994;   94US-00334847.
PR   10-NOV-1994;   94US-00337608.
PR   28-NOV-1994;   94US-00345516.
PR   16-DEC-1994;   94US-00357577.
PR   23-DEC-1994;   94US-00363233.
PR   30-JAN-1995;   95US-00380734.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Stinchcomb DT,  Chowrira B,  Direnzo A,  Draper KG,  Dudycz LW;
PI   Grimm S,  Karpeisky A,  Kisich K,  Matulic-Adamic J,  Mcswiggen JA;
PI   Modak A,  Pavco P,  Beigleman L,  Sullivan SM,  Sweedler D,  Thompson JD;
PI   Tracz D,  Usman N,  Wincott FE,  Woolf T;
XX
DR   WPI; 1995-351090/45.
XX
PT   Ribozymes having modified bases and methods for producing them - for use
PT   in inhibiting disease related genes.
XX
PS   Claim 2; Page 222; 407pp; English.
XX
CC   The present sequence represents a preferred target sequence for an
CC   enzymatic nucleic acid (i.e. a ribozyme) which cleaves interleukin-5 (IL-
CC   5) mRNA at the nucleotide base position indicated in the DE line. Regions
CC   of the mRNA that do not form secondary folding structures and that
CC   contain potential hammerhead and hairpin ribozyme cleavage sites were
CC   identified by computer analysis. Ribozymes directed against these mRNA
CC   sequences were designed and synthesised with modifications that improve
CC   their nuclease resistance. The ribozymes cleave the IL-5 target sequences
CC   and thereby inhibit IL-5 expression, making them useful for treating
CC   chronic asthma, e.g. by inhibiting the synthesis of IL-5 in lymphocytes
CC   and preventing the recruitment and activation of eosinophils. The
CC   ribozymes can also be used to treat eosinophilia (related to parasitic
CC   infection or with pulmonary infiltration) and L-tryptophan-associated
CC   eosinophilia-myalgia syndrome. (Updated on 25-MAR-2003 to correct PI
CC   field.)
XX
SQ   Sequence 18 BP; 5 A; 5 C; 4 G; 0 T; 4 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   77.8%;  Pred. No. 1.3e+02;
  Matches   14;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 GAACTCTGCTGATAGCCA 691
              ||||:|:||:||:|||||
Db          1 GAACUCUGCUGAUAGCCA 18


RESULT 206
AAT76222/c
ID   AAT76222 standard; DNA; 18 BP.
XX
AC   AAT76222;
XX
DT   12-SEP-1997  (first entry)
XX
DE   Human IL5 antisense oligonucleotide HUMIL5AS3.
XX
KW   Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW   chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS   Synthetic.
XX
PN   WO9640162-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US009306.
XX
PR   07-JUN-1995;   95US-00474497.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW,  Metzger WJ;
XX
DR   WPI; 1997-051871/05.
XX
PT   Treatment of airway diseases such as asthma - by topically applying
PT   adenosine-free antisense oligo:nucleotide to airway epithelium of
PT   subject.
XX
PS   Claim 5; Page 31; 71pp; English.
XX
CC   A method for treating airway disease in a subject has been produced,
CC   which involves the topical administration of an essentially adenosine
CC   free antisense oligonucleotide (ON) to the airway epithelium of the
CC   subject. The present sequence is an antisense oligonucleotide HUMIL5AS3
CC   specific for the human IL5. The method can be used to treat airway
CC   diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC   disease, bronchitis and other airway diseases characterised by an
CC   inflammatory response. By eliminating adenosine from the antisense ON,
CC   its liberation upon antisense degradation is prevented, thereby
CC   preventing adenosine-induced bronchoconstriction in patients with hyper-
CC   reactive airways
XX
SQ   Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1643 AGAAAACAAACAAAAAAC 1660
              ||||||||||||||||||
Db         18 AGAAAACAAACAAAAAAC 1


RESULT 207
AAT76220/c
ID   AAT76220 standard; DNA; 18 BP.
XX
AC   AAT76220;
XX
DT   12-SEP-1997  (first entry)
XX
DE   Human IL5 antisense oligonucleotide HUMIL5AS1.
XX
KW   Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW   chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS   Synthetic.
XX
PN   WO9640162-A1.
XX
PD   19-DEC-1996.
XX
```

PF 06-JUN-1996; 96WO-US009306.
XX
PR 07-JUN-1995; 95US-00474497.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW, Metzger WJ;
XX
DR WPI; 1997-051871/05.
XX
PT Treatment of airway diseases such as asthma - by topically applying
PT adenosine-free antisense oligo:nucleotide to airway epithelium of
PT subject.
XX
PS Claim 5; Page 31; 71pp; English.
XX
CC A method for treating airway disease in a subject has been produced,
CC which involves the topical administration of an essentially adenosine
CC free antisense oligonucleotide (ON) to the airway epithelium of the
CC subject. The present sequence is an antisense oligonucleotide HUMIL5AS1
CC specific for the human IL5. The method can be used to treat airway
CC diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC disease, bronchitis and other airway diseases characterised by an
CC inflammatory response. By eliminating adenosine from the antisense ON,
CC its liberation upon antisense degradation is prevented, thereby
CC preventing adenosine-induced bronchoconstriction in patients with hyper-
CC reactive airways
XX
SQ Sequence 18 BP; 0 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 325 AAAGGGGGGAAACAGGGA 342
||||||||||||||||||
Db 18 AAAGGGGGGAAACAGGGA 1

RESULT 208
AAX54018/c
ID AAX54018 standard; DNA; 18 BP.
XX
AC AAX54018;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human IL-5 antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 1999-229400/19.
XX
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 49; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC -end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

Query Match 0.6%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1643 AGAAAACAAACAAAAAAC 1660
||||||||||||||||||
Db 18 AGAAAACAAACAAAAAAC 1

RESULT 209
AAX54016/c
ID AAX54016 standard; DNA; 18 BP.
XX
AC AAX54016;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human IL-5 antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX

```
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 1999-229400/19.
XX
PT   New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT   vasoconstriction.
XX
PS   Disclosure; Page 49; 120pp; English.
XX
CC   The specification describes antisense oligonucleotides (AAX52869-X55271)
CC   directed against at least 2 mRNAs selected from target genes, coding and
CC   non-coding regions of RNAs corresponding to target genes, gene initiation
CC   codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC   -end and the juxta-section between coding and non-coding regions and all
CC   segments of RNAs encoding proteins associated with one or more diseases,
CC   conditions or mixtures. The antisense oligonucleotides may be derived
CC   from sequences AAX55272-74. These multiple target oligonucleotides
CC   (specifically AAX55180-271) can be used for the antisense treatment of
CC   diseases and conditions. Typical diseases and conditions are those
CC   associated with impaired respiration and inflammation, including lung
CC   diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC   acute asthma, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC   pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC   disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC   colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC   hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC   well as all types of cancers which may metastasize or have metastasized
CC   to the lungs, including breast and prostate cancer
XX
SQ   Sequence 18 BP; 0 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        325 AAAGGGGGGAAACAGGGA 342
              ||||||||||||||||||
Db         18 AAAGGGGGGAAACAGGGA 1


RESULT 210
AAA33462/c
ID   AAA33462 standard; DNA; 18 BP.
XX
AC   AAA33462;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1151.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Claim 18; Page 409; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1643 AGAAAACAAACAAAAAAC 1660
              ||||||||||||||||||
Db         18 AGAAAACAAACAAAAAAC 1


RESULT 211
AAA33460/c
ID   AAA33460 standard; DNA; 18 BP.
XX
AC   AAA33460;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1149.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
```

```
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Claim 18; Page 408; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 18 BP; 0 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        325 AAAGGGGGGAAACAGGGA 342
              ||||||||||||||||||
Db         18 AAAGGGGGGAAACAGGGA 1


RESULT 212
AAF19582/c
ID   AAF19582 standard; DNA; 18 BP.
XX
AC   AAF19582;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human IL5 polynucleotide fragment #1149.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
XX
PR   06-APR-1999;   99US-0127958P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not trigger
PT   adenosine receptors during metabolism, useful e.g. for treating cancers
PT   and respiratory obstructions.
XX
PS   Claim 14; Page 208; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC   surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention
XX
SQ   Sequence 18 BP; 0 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        325 AAAGGGGGGAAACAGGGA 342
              ||||||||||||||||||
Db         18 AAAGGGGGGAAACAGGGA 1


RESULT 213
AAF19584/c
ID   AAF19584 standard; DNA; 18 BP.
XX
AC   AAF19584;
XX
```

```
DT   14-MAR-2001  (first entry)
XX
DE   Human IL5 polynucleotide fragment #1151.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
XX
PR   06-APR-1999;   99US-0127958P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not trigger
PT   adenosine receptors during metabolism, useful e.g. for treating cancers
PT   and respiratory obstructions.
XX
PS   Claim 14; Page 208; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC   surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention
XX
SQ   Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1643 AGAAAACAAACAAAAAAC 1660
             ||||||||||||||||||
Db         18 AGAAAACAAACAAAAAAC 1


RESULT 214
ABX03869
ID   ABX03869 standard; cDNA; 18 BP.
XX
AC   ABX03869;
XX
DT   09-JAN-2003  (first entry)
XX
DE   DNA encoding secreted protein signal peptide sequence #78.
XX
KW   Differential display method; leucine-rich motif; transmembrane protein;
KW   secreted protein; secreted protein signal peptide; ss.
XX
OS   Unidentified.
XX
PN   WO200259259-A2.
XX
PD   01-AUG-2002.
XX
PF   23-JAN-2002; 2002WO-IL000071.
XX
PR   23-JAN-2001; 2001US-0263158P.
XX
PA   (UYRA-) UNIV RAMOT APPLIED RES & IND DEV LTD.
XX
PI   Wreschner DH;
XX
DR   WPI; 2002-599769/64.
DR   P-PSDB; ABG98398.
XX
PT   Differential display method for identifying secreted or transmembrane
PT   protein, comprises contacting a DNA with a first primer that hybridizes
PT   to a sequence coding for a leucine-rich motif and with a second
PT   oligonucleotide primer.
XX
PS   Disclosure; Fig 2; 37pp; English.
XX
CC   The invention relates to a differential display comprising contacting
CC   cDNA with a first primer that hybridises to an oligonucleic sequence
CC   coding for a leucine-rich motif, and with a second oligonucleotide primer
CC   to form a cDNA-hybrid molecule. The method comprises obtaining mRNA from
CC   at least 2 samples, synthesising cDNA from the RNA of each sample,
CC   contacting the cDNA with a first primer that hybridises to an
CC   oligonucleic sequence coding for a leucine-rich motif, and with a second
CC   oligonucleotide primer to form cDNA-hybrid molecules, amplifying the cDNA
CC   -hybrid molecules, detecting amplified products and comparing the
CC   amplified products from each sample to identify distinctive amplified
CC   products coding for at least one secreted or transmembrane protein. The
CC   method is useful for discovering novel secreted and/or transmembrane
CC   proteins which are important for cell processes and play an important
CC   role in determining its phenotype, and which act as mediators for the
CC   transfer of signals from external environment into the cell itself, thus
CC   modulating gene expression. Sequences ABX03792-ABX03869 represent DNA
CC   encoding secreted protein signal peptide sequences
XX
SQ   Sequence 18 BP; 3 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        574 AGTTTGCTAGCTCTTGGA 591
              ||||||||||||||||||
Db          1 AGTTTGCTAGCTCTTGGA 18


RESULT 215
```

ABZ95278/c
ID ABZ95278 standard; DNA; 18 BP.
XX
AC ABZ95278;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human IL-5 antisense fragment no.1142.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10520; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

Query Match 0.6%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1643 AGAAAACAAACAAAAAAC 1660
||||||||||||||||||
Db 18 AGAAAACAAACAAAAAAC 1

RESULT 216

ABZ95276/c
ID ABZ95276 standard; DNA; 18 BP.
XX
AC ABZ95276;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human IL-5 antisense fragment no.1140.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10518; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 18 BP; 0 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 18; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 1.3e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 325 AAAGGGGGGAAACAGGGA 342
||||||||||||||||||
Db 18 AAAGGGGGGAAACAGGGA 1

RESULT 217

```
ABD19250/c
ID   ABD19250 standard; DNA; 18 BP.
XX
AC   ABD19250;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human IL5 DNA fragment 1140.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 10518; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 18 BP; 0 A; 9 C; 1 G; 8 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        325 AAAGGGGGGAAACAGGGA 342
              ||||||||||||||||||
Db         18 AAAGGGGGGAAACAGGGA 1


RESULT 218
ABD19252/c
ID   ABD19252 standard; DNA; 18 BP.
XX
AC   ABD19252;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human IL5 DNA fragment 1142.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 10520; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
```

```
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 18 BP; 0 A; 1 C; 3 G; 14 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1.3e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1643 AGAAAACAAACAAAAAAC 1660
              ||||||||||||||||||
Db         18 AGAAAACAAACAAAAAAC 1


RESULT 219
AAV01431
ID   AAV01431 standard; DNA; 21 BP.
XX
AC   AAV01431;
XX
DT   27-MAR-1998  (first entry)
XX
DE   IL-5 promoter mutant palindromic regulatory element, PRE1-4.
XX
KW   Human; interleukin-5; IL-5; palindromic regulatory element; promoter;
KW   inhibition; modulation; asthma; eosinophilia; mutant; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO9733990-A1.
XX
PD   18-SEP-1997.
XX
PF   14-MAR-1997;   97WO-AU000162.
XX
PR   15-MAR-1996;   96AU-00008691.
XX
PA   (TVWT-) TVW TELETHON INST CHILD HEALTH RES.
XX
PI   Sanderson CJ,  Mordvinov VA;
XX
DR   WPI; 1997-470871/43.
XX
PT   Nucleic acid sequence that inhibits activity of the interleukin-5
PT   promoter - and proteins that interact with this sequence to modulate IL-5
PT   gene expression, for treating asthma, eosinophilia or immune-compromised
PT   states.
XX
PS   Example 4; Page 14; 50pp; English.
XX
CC   The present sequence is the human interleukin-5 (hIL-5) promoter mutant
CC   palindromic regulatory element (PRE1-4), which inhibits the activity of
CC   the hIL-5 promoter and therefore IL-5 expression. PRE1-4 can be used to
CC   modulate IL-5 activity by acting on the corresponding region of the hIL-5
CC   promoter, especially in cases of asthma and eosinophilia or in
CC   immunocompromised subjects. PRE1-4 specifically inhibits transcription
CC   from the IL-5 promoter, as no such sequence is present in genes encoding
CC   other cytokines
XX
SQ   Sequence 21 BP; 5 A; 4 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 18;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1.5e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        412 CGATATGCCATTATTAGG 429
              ||||||||||||||||||
Db          1 CGATATGCCATTATTAGG 18


RESULT 220
AAH19614/c
ID   AAH19614 standard; DNA; 19 BP.
XX
AC   AAH19614;
XX
DT   31-JUL-2001  (first entry)
XX
DE   Mouse IL-5 antisense PCR primer #2.
XX
KW   Mouse; IFN-gamma; interferon-gamma; antiviral; gene therapy; vaccine;
KW   respiratory infection; respiratory syncytial virus; RSV; interleukin-5;
KW   IL-5; PCR primer; ss.
XX
OS   Mus sp.
XX
PN   US2001006951-A1.
XX
PD   05-JUL-2001.
XX
PF   23-FEB-1999;   99US-00259411.
XX
PR   23-FEB-1998;   98US-0075588P.
XX
PA   (MOHA/) MOHAPATRA S S.
PA   (MATS/) MATSUSE H.
PA   (BEHE/) BEHERA A K.
PA   (KUMA/) KUMAR M.
XX
PI   Mohapatra SS,  Matsuse H,  Behera AK,  Kumar M;
XX
DR   WPI; 2001-389297/41.
XX
PT   New gene therapy composition useful in the prophylaxis of respiratory
PT   infections, particularly RSV.
XX
PS   Example 1; Page 8; 20pp; English.
XX
CC   The present sequence was used to analyse the mRNA expression of mouse
CC   interleukin-5 (IL-5) in an example illustrating an invention relating to
CC   a gene therapy composition for the prevention of respiratory infections.
CC   The composition comprises DNA encoding interferon (IFN)-gamma and may be
CC   administered to the patient by intranasal gene transfer. It is useful for
CC   treating respiratory viral infections, especially respiratory syncytial
CC   virus (RSV). The composition of the invention may be administered to an
CC   infant or other immunosuppressed individuals
XX
SQ   Sequence 19 BP; 7 A; 6 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.4;  DB 1;  Length 19;
  Best Local Similarity   94.7%;  Pred. No. 1.5e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2167 TGCAAGAGTTTCTTGGTGT 2185
              |||||||||| ||||||||
Db         19 TGCAAGAGTTCCTTGGTGT 1


RESULT 221
ADG64618
ID   ADG64618 standard; RNA; 19 BP.
XX
AC   ADG64618;
XX
DT   11-MAR-2004  (first entry)
XX
```

```
DE   Human G72 siNA oligonucleotide SEQ ID NO:64.
XX
KW   RNA interference; short interfering nucleic acid; siNA;
KW   short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW   short hairpin RNA; shRNA; expression modulation; gene therapy;
KW   drug screening; diagnosis; therapeutic target identification;
KW   pharmacogenomics; gene function analysis; gene mapping; neuroleptic;
KW   schizophrenia; human; G72; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO2003070743-A1.
XX
PD   28-AUG-2003.
XX
PF   13-FEB-2003; 2003WO-US004397.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   05-DEC-2002; 2002US-0431105P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L,  Haeberli P;
XX
DR   WPI; 2003-712607/67.
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of schizophrenia, downregulates expression of the G72 gene.
XX
PS   Example 3; SEQ ID NO 64; 139pp; English.
XX
CC   The invention relates to short interfering nucleic acids (siNA) which
CC   downregulate expression of the human G72 gene by RNA interference. The
CC   siNAs may or may not comprise ribonucleotides and may be double or single
CC   stranded. They further comprise sense and antisense regions, or
CC   alternatively are assembled from a sense oligonucleotide and an antisense
CC   oligonucleotide. Specifically, the siNAs include short interfering RNA
CC   (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA
CC   (shRNA). The siNAs can be unmodified or chemically modified, can contain
CC   deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC   vector or enzymatically synthesised. The invention also relates to kits
CC   for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
CC   of siNA; and vectors that express siNA. The siNAs are used to modulate
CC   expression of the G72 gene in cells, tissue explants or organisms (e.g.,
CC   by ex vivo gene therapy), or in grafts and transplants for the treatment
CC   of a variety of conditions. The human G72 siNAs have neuroleptic activity
CC   and can be used for treating schizophrenia. The siNAs are also useful for
CC   drug screening, diagnosis, therapeutic target identification and
CC   validation, genetic engineering, pharmacogenomics, studying gene
CC   function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC   The present sequence represents the lower strand of a human G72-targeted
CC   double-stranded siNA.
XX
SQ   Sequence 19 BP; 10 A; 0 C; 3 G; 0 T; 6 U; 0 Other;

  Query Match             0.5%;  Score 17.4;  DB 1;  Length 19;
  Best Local Similarity   63.2%;  Pred. No. 1.5e+02;
  Matches   12;  Conservative    6;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        253 ATTTTAAGAAATGCAAATG 271
              |:::||||||:| |||:|
Db          1 AUUUUAAGAAAUGAAAAUG 19


RESULT 222
ADG64562/c
ID   ADG64562 standard; RNA; 19 BP.
XX
AC   ADG64562;
XX
DT   11-MAR-2004  (first entry)
XX
DE   Human G72 siNA oligonucleotide SEQ ID NO:8.
XX
KW   RNA interference; short interfering nucleic acid; siNA;
KW   short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
KW   short hairpin RNA; shRNA; expression modulation; gene therapy;
KW   drug screening; diagnosis; therapeutic target identification;
KW   pharmacogenomics; gene function analysis; gene mapping; neuroleptic;
KW   schizophrenia; human; G72; target sequence; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO2003070743-A1.
XX
PD   28-AUG-2003.
XX
PF   13-FEB-2003; 2003WO-US004397.
XX
PR   20-FEB-2002; 2002US-0358580P.
PR   11-MAR-2002; 2002US-0363124P.
PR   06-JUN-2002; 2002US-0386782P.
PR   29-AUG-2002; 2002US-0406784P.
PR   05-SEP-2002; 2002US-0408378P.
PR   09-SEP-2002; 2002US-0409293P.
PR   05-DEC-2002; 2002US-0431105P.
PR   15-JAN-2003; 2003US-0440129P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J,  Beigelman L,  Haeberli P;
XX
DR   WPI; 2003-712607/67.
XX
PT   New short interfering nucleic acid, useful e.g. for treatment and
PT   diagnosis of schizophrenia, downregulates expression of the G72 gene.
XX
PS   Example 3; SEQ ID NO 8; 139pp; English.
XX
CC   The invention relates to short interfering nucleic acids (siNA) which
CC   downregulate expression of the human G72 gene by RNA interference. The
CC   siNAs may or may not comprise ribonucleotides and may be double or single
CC   stranded. They further comprise sense and antisense regions, or
CC   alternatively are assembled from a sense oligonucleotide and an antisense
CC   oligonucleotide. Specifically, the siNAs include short interfering RNA
CC   (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA
CC   (shRNA). The siNAs can be unmodified or chemically modified, can contain
CC   deoxyribonucleotides, and can be chemically synthesised, expressed from a
CC   vector or enzymatically synthesised. The invention also relates to kits
CC   for the in vitro or in vivo delivery of siNA; conjugates and/or complexes
CC   of siNA; and vectors that express siNA. The siNAs are used to modulate
CC   expression of the G72 gene in cells, tissue explants or organisms (e.g.,
CC   by ex vivo gene therapy), or in grafts and transplants for the treatment
CC   of a variety of conditions. The human G72 siNAs have neuroleptic activity
CC   and can be used for treating schizophrenia. The siNAs are also useful for
CC   drug screening, diagnosis, therapeutic target identification and
CC   validation, genetic engineering, pharmacogenomics, studying gene
CC   function, and gene mapping (e.g., of single nucleotide polymorphisms).
CC   The present sequence represents the upper strand of a human G72-targeted
CC   double-stranded siNA, which is identical to the G72 transcript target
CC   sequence.
XX
SQ   Sequence 19 BP; 6 A; 3 C; 0 G; 0 T; 10 U; 0 Other;

  Query Match             0.5%;  Score 17.4;  DB 1;  Length 19;
  Best Local Similarity   94.7%;  Pred. No. 1.5e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy        253 ATTTTAAGAAATGCAAATG 271
              ||||||||||||| |||||
Db         19 ATTTTAAGAAATGAAAATG 1


RESULT 223
AAH19613
ID   AAH19613 standard; DNA; 20 BP.
XX
AC   AAH19613;
XX
DT   31-JUL-2001  (first entry)
XX
DE   Mouse IL-5 PCR primer #1.
XX
KW   Mouse; IFN-gamma; interferon-gamma; antiviral; gene therapy; vaccine;
KW   respiratory infection; respiratory syncytial virus; RSV; interleukin-5;
KW   IL-5; PCR primer; ss.
XX
OS   Mus sp.
XX
PN   US2001006951-A1.
XX
PD   05-JUL-2001.
XX
PF   23-FEB-1999;   99US-00259411.
XX
PR   23-FEB-1998;   98US-0075588P.
XX
PA   (MOHA/) MOHAPATRA S S.
PA   (MATS/) MATSUSE H.
PA   (BEHE/) BEHERA A K.
PA   (KUMA/) KUMAR M.
XX
PI   Mohapatra SS,  Matsuse H,  Behera AK,  Kumar M;
XX
DR   WPI; 2001-389297/41.
XX
PT   New gene therapy composition useful in the prophylaxis of respiratory
PT   infections, particularly RSV.
XX
PS   Example 1; Page 8; 20pp; English.
XX
CC   The present sequence was used to analyse the mRNA expression of mouse
CC   interleukin-5 (IL-5) in an example illustrating an invention relating to
CC   a gene therapy composition for the prevention of respiratory infections.
CC   The composition comprises DNA encoding interferon (IFN)-gamma and may be
CC   administered to the patient by intranasal gene transfer. It is useful for
CC   treating respiratory viral infections, especially respiratory syncytial
CC   virus (RSV). The composition of the invention may be administered to an
CC   infant or other immunosuppressed individuals
XX
SQ   Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17.4;  DB 1;  Length 20;
  Best Local Similarity   94.7%;  Pred. No. 1.5e+02;
  Matches   18;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        556 AGGATGCTTCTGCATTTGA 574
              ||||||||||||| ||||
Db          2 AGGATGCTTCTGCACTTGA 20


RESULT 224
AAQ57189
ID   AAQ57189 standard; mRNA; 17 BP.
XX
AC   AAQ57189;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Enzymatic RNA molecule IL-5 mRNA target sequence.
XX
KW   Interleukin-5; specific; cleavage; target RNA; protein; expression;
KW   inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention;
KW   psoriasis; asthma; inflammatory diseases; restenosis;
KW   cardiovascular condition; hypertension; arthritis; ss.
XX
OS   Synthetic.
XX
PN   WO9402595-A1.
XX
PD   03-FEB-1994.
XX
PF   02-JUL-1993;   93WO-US006316.
XX
PR   17-JUL-1992;   92US-00916763.
PR   07-DEC-1992;   92US-00987132.
PR   07-DEC-1992;   92US-00989848.
PR   07-DEC-1992;   92US-00989849.
PR   19-JAN-1993;   93US-00008895.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Sullivan SM,  Draper KG;
XX
DR   WPI; 1994-048853/06.
XX
PT   Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT   inflammatory, arthritic, stenotic or cardiovascular diseases or
PT   conditions.
XX
PS   Claim 3; Page 16; 65pp; English.
XX
CC   This is an IL-5 mRNA target sequence (nucleotide no. 10) of an enzymatic
CC   RNA molecule (ribozyme) which cleaves mRNA associated with the
CC   development or maintenance of a psoriatic or asthmatic condition. The
CC   concn. of the ribozyme necessary to effect a therapeutic treatment is
CC   lower than that of an antisense oligonucleotide and the specificity of
CC   action is higher. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 17 BP; 6 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        518 CTTTGCCAAAGGCAAAC 534
              |||||||||||||||||
Db          1 CTTTGCCAAAGGCAAAC 17


RESULT 225
AAV01430
ID   AAV01430 standard; DNA; 21 BP.
XX
AC   AAV01430;
XX
DT   27-MAR-1998  (first entry)
XX
DE   IL-5 promoter mutant palindromic regulatory element, PRE1-3.
XX
KW   Human; interleukin-5; IL-5; palindromic regulatory element; promoter;
KW   inhibition; modulation; asthma; eosinophilia; mutant; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO9733990-A1.
XX
PD   18-SEP-1997.
XX
PF   14-MAR-1997;   97WO-AU000162.
XX
PR   15-MAR-1996;   96AU-00008691.
```

```
XX
PA   (TVWT-) TVW TELETHON INST CHILD HEALTH RES.
XX
PI   Sanderson CJ,  Mordvinov VA;
XX
DR   WPI; 1997-470871/43.
XX
PT   Nucleic acid sequence that inhibits activity of the interleukin-5
PT   promoter - and proteins that interact with this sequence to modulate IL-5
PT   gene expression, for treating asthma, eosinophilia or immune-compromised
PT   states.
XX
PS   Example 4; Page 14; 50pp; English.
XX
CC   The present sequence is the human interleukin-5 (hIL-5) promoter mutant
CC   palindromic regulatory element (PRE1-3), which inhibits the activity of
CC   the hIL-5 promoter and therefore IL-5 expression. PRE1-3 can be used to
CC   modulate IL-5 activity by acting on the corresponding region of the hIL-5
CC   promoter, especially in cases of asthma and eosinophilia or in
CC   immunocompromised subjects. PRE1-3 specifically inhibits transcription
CC   from the IL-5 promoter, as no such sequence is present in genes encoding
CC   other cytokines
XX
SQ   Sequence 21 BP; 6 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 17;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1.7e+02;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        416 ATGCCATTATTAGGCAT 432
              |||||||||||||||||
Db          5 ATGCCATTATTAGGCAT 21


RESULT 226
AAC73663/c
ID   AAC73663 standard; DNA; 20 BP.
XX
AC   AAC73663;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Murine IL-5 antisense oligonucleotide ISIS #16989.
XX
KW   Mouse; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Mus musculus.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 2; Page 48; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.7e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2001 ACGGCCAAAAAGTAAGTTAC 2020
              || |||||||||||||||  |
Db         20 ACCGCCAAAAAGTAAGTTCC 1


RESULT 227
ABX04317/c
ID   ABX04317 standard; DNA; 20 BP.
XX
AC   ABX04317;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Mouse Interleukin 5 antisense oligonucleotide ISIS 16989.
XX
KW   Mouse; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Mus musculus.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 10; Page 14; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
```

CC is an antisense oligonucleotide targetting mouse IL5
XX
SQ Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.5%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2001 ACGGCCAAAAAGTAAGTTAC 2020
|| ||||||||||||||| |
Db 20 ACCGCCAAAAAGTAAGTTCC 1

RESULT 228
ABZ89011/c
ID ABZ89011 standard; DNA; 20 BP.
XX
AC ABZ89011;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 4253; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.5%; Score 16.8; DB 1; Length 20;
Best Local Similarity 90.0%; Pred. No. 1.7e+02;
Matches 18; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 976 TAAGTAAATTTCCTGTTTTA 995
||| ||| ||||||||||||
Db 20 TAACTAAGTTTCCTGTTTTA 1

RESULT 229
ABD25241/c
ID ABD25241 standard; DNA; 20 BP.
XX
AC ABD25241;
XX
DT 29-JUL-2004 (first entry)
XX
DE AI051839-derived oligonucleotide SEQ ID 4253.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 4253; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to

```
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 20 BP; 10 A; 2 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.7e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy        976 TAAGTAAATTTCCTGTTTTA 995
              ||| ||| ||||||||||||
Db         20 TAACTAAGTTTCCTGTTTTA 1


RESULT 230
ADK79725/c
ID   ADK79725 standard; DNA; 20 BP.
XX
AC   ADK79725;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide to target Nav1.3 #7059.
XX
KW   Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW   diabetic neuropathy; arthritic pain; migraine headache;
KW   infantile epilepsy; ataxia; ss.
XX
OS   Synthetic.
XX
PN   WO2004016754-A2.
XX
PD   26-FEB-2004.
XX
PF   14-AUG-2003; 2003WO-US025465.
XX
PR   14-AUG-2002; 2002US-0403416P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Roberds SL;
XX
DR   WPI; 2004-203785/19.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   Nav1.3, useful for useful for treating a disease or condition associated
PT   with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT   disorder, or ataxia.
XX
PS   Claim 4; SEQ ID NO 7059; 417pp; English.
XX
CC   The present invention relates to an antisense compound targeted to a
CC   nucleic acid molecule encoding Nav1.3, where the antisense compound
CC   specifically hybridizes with and inhibits the expression of Nav1.3. The
CC   compound and composition are useful for treating a disease or condition
CC   associated with Nav1.3, e.g. pain including but not limited to
CC   neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC   diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC   pain from burns, migraine headache, cluster headache, mild-to-moderate
CC   headache; seizure disorder such as childhood seizure disorder, including
CC   but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC   sequence represents a chimeric phosphorothioate oligonucleotide with
CC   2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC   human Nav1.3 expression, the oligonucleotides are designed to target
CC   different regions of the human Nav1.3 RNA.
XX
SQ   Sequence 20 BP; 6 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.7e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2022 CACATTCAATGGAAGCTATA 2041
              |||||||| ||||| |||||
Db         20 CACATTCACTGGAATCTATA 1


RESULT 231
ADK79309/c
ID   ADK79309 standard; DNA; 20 BP.
XX
AC   ADK79309;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Chimeric phosphorothioate oligonucleotide to target Nav1.3 #6643.
XX
KW   Nav1.3; Analgesic; Nootropic; Neuroprotective; post-herpetic neuralgia;
KW   diabetic neuropathy; arthritic pain; migraine headache;
KW   infantile epilepsy; ataxia; ss.
XX
OS   Synthetic.
XX
PN   WO2004016754-A2.
XX
PD   26-FEB-2004.
XX
PF   14-AUG-2003; 2003WO-US025465.
XX
PR   14-AUG-2002; 2002US-0403416P.
XX
PA   (PHAA ) PHARMACIA CORP.
XX
PI   Roberds SL;
XX
DR   WPI; 2004-203785/19.
XX
PT   New antisense compound targeted to a nucleic acid molecule encoding
PT   Nav1.3, useful for useful for treating a disease or condition associated
PT   with Nav1.3, e.g. pain, seizure disorder such as childhood seizure
PT   disorder, or ataxia.
XX
PS   Claim 4; SEQ ID NO 6643; 417pp; English.
XX
CC   The present invention relates to an antisense compound targeted to a
CC   nucleic acid molecule encoding Nav1.3, where the antisense compound
CC   specifically hybridizes with and inhibits the expression of Nav1.3. The
CC   compound and composition are useful for treating a disease or condition
CC   associated with Nav1.3, e.g. pain including but not limited to
CC   neuropathic pain, post-herpetic neuralgia, chronic pain, lower back pain,
CC   diabetic neuropathy, trigeminal neuropathy, arthritic pain, acute pain,
CC   pain from burns, migraine headache, cluster headache, mild-to-moderate
CC   headache; seizure disorder such as childhood seizure disorder, including
CC   but not limited to neonatal or infantile epilepsy; or ataxia. The present
CC   sequence represents a chimeric phosphorothioate oligonucleotide with
CC   2'MOE wings and a deoxy gap. Used during the antisense inhibition of
CC   human Nav1.3 expression, the oligonucleotides are designed to target
CC   different regions of the human Nav1.3 RNA.
XX
SQ   Sequence 20 BP; 6 A; 2 C; 5 G; 7 T; 0 U; 0 Other;

  Query Match             0.5%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.7e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;
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```
Qy       2021 ACACATTCAATGGAAGCTAT 2040
             |||||||||| ||||| ||||
Db         20 ACACATTCACTGGAATCTAT 1
```

RESULT 232
ADR11994/c
ID ADR11994 standard; DNA; 20 BP.
XX
AC ADR11994;
XX
DT 23-SEP-2004 (first entry)
XX
DE Murine interleukin-5 (IL-5) DNA antisense oligonucleotide #15.
XX
KW Mouse; interleukin-5; IL-5; ss; antisense oligonucleotide;
KW IL-5 receptor a; phosphorothioate; 2'-O-methoxyethyl sugar moiety;
KW 5-methylcytosine; IL-5 signal transduction; apoptosis;
KW eosinophilic syndrome; asthma; antiasthmatic; cytostatic.
XX
OS Mus musculus.
XX
PN US2004121376-A1.
XX
PD 24-JUN-2004.
XX
PF 06-OCT-2003; 2003US-00679532.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
PR 07-MAR-2001; 2001US-00800629.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2004-479669/45.
XX
PT New antisense compound modulating interleukin-5 signal transduction,
PT useful in promoting apoptosis and in treating eosinophilic syndrome or
PT asthma.
XX
PS Example 10; SEQ ID NO 16; 77pp; English.
XX
CC The invention relates to an antisense compound that modulates interleukin
CC -5 (IL-5) signal transduction. The antisense compound is an antisense
CC oligonucleotide targeted to a nucleic acid molecule encoding a mammalian
CC IL-5 or IL-5 receptor a, where the antisense compound modulates the
CC expression of mammalian IL-5 or IL-5 receptor a. The antisense
CC oligonucleotide comprises at least one modified internucleoside linkage,
CC i.e. a phosphorothioate linkage, or a peptide nucleic acid, at least one
CC modified sugar moiety, i.e. a 2'-O-methoxyethyl sugar moiety, and at
CC least one modified nucleobase, i.e. 5-methylcytosine. Altering the ratio
CC of the isoforms of mammalian IL-5 receptor a in mammalian cells or
CC tissues comprises contacting the cells or tissues with an antisense
CC compound so that the ratio of the mammalian IL-5 receptor a isoforms is
CC altered. Treating a mammal having a disease or condition associated with
CC IL-5 signal transduction or IL-5 or IL-5 receptor a expression, or a
CC disease or condition characterised by a reduction in apoptosis comprises
CC administering to the mammal a therapeutic or prophylactic amount of an
CC antisense compound so that IL-5 signal transduction, IL-5 or IL-5
CC receptor a expression, or IL-5 receptor a is modulated, the ratio of IL-5
CC receptor a isoforms is altered, or expression of membrane IL-5 receptor a
CC is modulated. The antisense compounds, methods and compositions are
CC useful in promoting apoptosis and in treating eosinophilic syndrome and
CC asthma. This sequence represents a murine IL-5 DNA antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 3 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 16.8;  DB 1;  Length 20;
  Best Local Similarity   90.0%;  Pred. No. 1.7e+02;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2001 ACGGCCAAAAAGTAAGTTAC 2020
              || |||||||||||||||  |
Db         20 ACCGCCAAAAAGTAAGTTCC 1
```

RESULT 233
AAV32489
ID AAV32489 standard; DNA; 20 BP.
XX
AC AAV32489;
XX
DT 11-SEP-1998 (first entry)
XX
DE Human retinaldehyde binding protein HRGR1-2 cDNA primer A800.
XX
KW Human retinaldehyde binding protein HRGR1-2; retinal pigment epithelium;
KW 11-cis-retinal; all-trans retinal; visual system; binding assay;
KW chromophore; PCR; primer; amplification; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US5763578-A.
XX
PD 09-JUN-1998.
XX
PF 16-DEC-1994; 94US-00358171.
XX
PR 16-DEC-1994; 94US-00358171.
XX
PA (FONG/) FONG H K W.
XX
PI Fong HKW;
XX
DR WPI; 1998-347415/30.
XX
PT Human and bovine retin-aldehyde-binding proteins - used to detect
PT aberration(s) of retinal binding in visual excitation systems.
XX
PS Disclosure; Col 23; 39pp; English.
XX
CC Primer A800 and SATG (AAV32486) were used in the method of the invention
CC to determine the prevelance of cDNA clones with a 114 bp deletion in the
CC human retinaldehyde binding protein HRGR1-2 cDNA (AAV32476). The HRGR1-7
CC cDNA (AAV32477) of clone HRGR1-7, isolated from a human lambda-gt10
CC retinal library, was found to contain the deleted region which
CC corresponded to the nucleotide sequence of exon 6 (AAV32483) of the human
CC retinaldehyde binding protein gene. The human retinaldehyde binding
CC protein HRGR1-2 (AAW48858) binds both 11-cis-retinal and all-trans
CC retinal. The invention claims that molecular aberration of the visual
CC system can be detected in binding assays by observing any changes in the
CC binding of the retinaldehyde binding protein HRGR1-2 to its chromophores.
CC The retinaldehyde binding protein hrgr1-2 can also be used to raise
CC antibodies, which in turn can be used to detect changes of the protein in
CC samples
XX
SQ Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

```
  Query Match             0.5%;  Score 16.4;  DB 1;  Length 20;
  Best Local Similarity   94.4%;  Pred. No. 1.7e+02;
  Matches   17;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2974 GCAGATCATCTCATTGCC 2991
              ||||| ||||||||||||
Db          1 GCAGACCATCTCATTGCC 18
```

RESULT 234
AAX96157/c

ID AAX96157 standard; DNA; 20 BP.
XX
AC AAX96157;
XX
DT 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
OS Synthetic.
OS Chlamydophila pneumoniae.
XX
PN WO9927105-A2.
XX
PD 03-JUN-1999.
XX
PF 20-NOV-1998; 98WO-IB001890.
XX
PR 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
PA (GEST) GENSET.
XX
PI Griffais R;
XX
DR WPI; 1999-357842/30.
XX
PT Genome sequence of Chlamydia pneumoniae.
XX
PS Page 1804; Disclosure; 1912pp; English.
XX
CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AAX91990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotides sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.5%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2936 TGTAACTAGGTTCCTGCC 2953
|| ||||||||||||||||
Db 18 TGCAACTAGGTTCCTGCC 1

RESULT 235
AAZ55851
ID AAZ55851 standard; DNA; 20 BP.
XX
AC AAZ55851;
XX
DT 10-APR-2000 (first entry)
XX
DE Human retinaldehyde binding protein cDNA PCR primer A800.
XX
KW Retinaldehyde binding protein; rgr gene; all-trans retinal; chromophore;
KW photoreceptor; G protein-coupled receptor; human; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN US6008338-A.
XX
PD 28-DEC-1999.
XX
PF 05-JUN-1998; 98US-00090947.
XX
PR 16-DEC-1994; 94US-00358171.
XX
PA (FONG/) FONG H K W.
XX
PI Fong HK;
XX
DR WPI; 2000-096388/08.
XX
PT Isolated nucleic acid molecule encoding a photoreceptive retinaldehyde-
PT binding protein for use in antisense therapeutics.
XX
PS Example 16; Col 23-24; 40pp; English.
XX
CC The invention relates to mammalian retinaldehyde binding proteins and
CC nucleotides encoding them. Retinaldehyde binding protein is the first
CC light-absorbing vertebrate protein identified to stably and
CC preferentially bind the all-trans-retinal chromophore. Retinaldehyde
CC binding proteins have distant homology to other G protein-coupled
CC receptors, possessing seven transmembrane domains. The nucleic acid and
CC encoded protein are useful for assaying changes in the structure or the
CC retinaldehyde-binding proteins which would be indicative of a molecular
CC aberration in the retinal pigment epithelium, visual system or brain. The
CC nucleic acid is also useful in antisense therapeutics and in the
CC recombinant expression of retinaldehyde-binding protein. Sequences
CC AAZ55848-Z55854 represent probes or PCR primers used in exemplifications
CC of the invention
XX
SQ Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.5%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2974 GCAGATCATCTCATTGCC 2991
||||| ||||||||||||
Db 1 GCAGACCATCTCATTGCC 18

RESULT 236
ABZ93890/c
ID ABZ93890 standard; DNA; 20 BP.
XX
AC ABZ93890;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 9132; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 11 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 366 TAAATTTATTTTTTAAGA 383
||||||||||||||||| |
Db 20 TAAATTTATTTTTTAAAA 3

RESULT 237
ABD30120/c
ID ABD30120 standard; DNA; 20 BP.
XX
AC ABD30120;
XX
DT 29-JUL-2004 (first entry)
XX
DE AA677534-derived oligonucleotide SEQ ID 9132.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ss; primer.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 9132; 763pp; English.
XX
CC This invention describes a novel composition (a) a first active agent,
CC comprising oligonucleotides, effective for alleviating
CC bronchoconstriction, respiratory tract inflammation, allergies and
CC reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC surfactant depletion or hyposecretion, when administered to a mammal. The
CC oligonucleotides are derived from a gene encoding or regulating
CC expression of a target polypeptide associated with lung airway or lung
CC dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC The invention also describes a kit, that comprises: (a) a delivery
CC device, in separate containers, (b) the oligonucleotides, (c)
CC instructions for adding a carrier and for use of the kit. The composition
CC of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC beta-adrenergic agonist. The composition is useful for preventing or
CC treating a respiratory, lung or malignant disease. The administered
CC composition comprises oligo and is administered to reduce the production
CC or availability, or to increase the degradation of the target mRNA or to
CC reduce the amount of target polypeptide present in the lungs. The
CC pulmonary obstruction, and/or bronchoconstriction and/or lung
CC inflammation, allergies and/or surfactant hypoproduction are associated
CC with a disease or condition such as pulmonary vasoconstriction,
CC inflammation, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC transplantation rejection, pulmonary infections, bronchitis or cancer.
CC The reduced adenosine content of the anti-sense oligos corresponding to
CC thymidines present in the target RNA serves to prevent the breakdown of
CC the oligonucleotides into products that free adenosine into the system
CC e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC prevent any unwanted effects due to it
XX
SQ Sequence 20 BP; 11 A; 0 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.5%; Score 16.4; DB 1; Length 20;
Best Local Similarity 94.4%; Pred. No. 1.7e+02;
Matches 17; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 366 TAAATTTATTTTTTAAGA 383
||||||||||||||||| |
Db 20 TAAATTTATTTTTTAAAA 3

Search completed: December 14, 2004, 16:05:39
Job time : 9 secs

GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: December 14, 2004, 16:01:10 ; Search time 6 Seconds
(without alignments)
4.499 Million cell updates/sec

Title: US-10-679-532-78
Perfect score: 3230
Sequence: 1 ATCCTAATCAAGACCCCAGT.....AAAACTTCTCTCAAGGATCC 3230

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 185 seqs, 4179 residues

Total number of hits satisfying chosen parameters: 370

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 162 summaries

Database : rgedb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	50	1.5	50	1	AR032602	ACCESSION:AR032602
	2	50	1.5	50	1	I29342	ACCESSION:I29342
	3	50	1.5	50	1	I91016	ACCESSION:I91016
	4	50	1.5	50	1	AR209266	ACCESSION:AR209266
	5	46.4	1.4	48	1	I05454	ACCESSION:I05454
c	6	45.4	1.4	47	1	I71456	ACCESSION:I71456
	7	43	1.3	43	1	I71457	ACCESSION:I71457
c	8	41.2	1.3	42	1	BD211601	ACCESSION:BD211601
c	9	41.2	1.3	42	1	AR241579	ACCESSION:AR241579
c	10	41.2	1.3	42	1	AR254535	ACCESSION:AR254535
	11	34	1.1	34	1	I39775	ACCESSION:I39775
c	12	33.4	1.0	35	1	I71458	ACCESSION:I71458
	13	33.4	1.0	39	1	I71455	ACCESSION:I71455
c	14	33	1.0	33	1	A56954	ACCESSION:A56954
c	15	33	1.0	33	1	AR080304	ACCESSION:AR080304
	16	33	1.0	33	1	I39778	ACCESSION:I39778
	17	30	0.9	30	1	BD170558	ACCESSION:BD170558
	18	29	0.9	29	1	I39780	ACCESSION:I39780
c	19	28	0.9	28	1	AR089936	ACCESSION:AR089936
c	20	28	0.9	28	1	AR196971	ACCESSION:AR196971
c	21	28	0.9	28	1	AR259125	ACCESSION:AR259125
	22	28	0.9	28	1	AR300439	ACCESSION:AR300439
	23	28	0.9	28	1	AX083943	ACCESSION:AX083943
c	24	27	0.8	27	1	A39732	ACCESSION:A39732
	25	27	0.8	27	1	I39768	ACCESSION:I39768
c	26	27	0.8	27	1	BD170559	ACCESSION:BD170559
	27	27	0.8	29	1	AX801573	ACCESSION:AX801573
	28	27	0.8	29	1	AX805805	ACCESSION:AX805805
	29	26	0.8	26	1	AR089935	ACCESSION:AR089935
	30	26	0.8	26	1	AR196970	ACCESSION:AR196970
	31	26	0.8	26	1	AR259124	ACCESSION:AR259124
c	32	25.4	0.8	27	1	BD211602	ACCESSION:BD211602
c	33	25.4	0.8	27	1	AR241580	ACCESSION:AR241580
c	34	25.4	0.8	27	1	AR254536	ACCESSION:AR254536
	35	25	0.8	25	1	A39731	ACCESSION:A39731
	36	24	0.7	24	1	A86923	ACCESSION:A86923
	37	24	0.7	24	1	AR048335	ACCESSION:AR048335
	38	24	0.7	24	1	AR079226	ACCESSION:AR079226
	39	24	0.7	24	1	AR309657	ACCESSION:AR309657
	40	23	0.7	23	1	I39774	ACCESSION:I39774
c	41	23	0.7	23	1	AX643972	ACCESSION:AX643972
c	42	23	0.7	23	1	AX644889	ACCESSION:AX644889
	43	22.4	0.7	27	1	AR252260	ACCESSION:AR252260
	44	22.4	0.7	27	1	AX003065	ACCESSION:AX003065
	45	22.4	0.7	27	1	BD129707	ACCESSION:BD129707
	46	22	0.7	22	1	AR080303	ACCESSION:AR080303
	47	22	0.7	22	1	E09217	ACCESSION:E09217
c	48	22	0.7	22	1	E09218	ACCESSION:E09218
	49	22	0.7	22	1	I39767	ACCESSION:I39767
	50	22	0.7	22	1	I39771	ACCESSION:I39771
	51	21	0.7	21	1	A56953	ACCESSION:A56953
c	52	21	0.7	21	1	A86924	ACCESSION:A86924
c	53	21	0.7	21	1	AR048336	ACCESSION:AR048336
c	54	21	0.7	21	1	AR079227	ACCESSION:AR079227
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	56	21	0.7	21	1	AX643971	ACCESSION:AX643971
	57	21	0.7	21	1	AX643984	ACCESSION:AX643984
	58	21	0.7	21	1	AX644888	ACCESSION:AX644888
	59	21	0.7	21	1	AX644902	ACCESSION:AX644902
c	60	21	0.7	21	1	AX801572	ACCESSION:AX801572
c	61	21	0.7	21	1	AX805804	ACCESSION:AX805804
c	62	20	0.6	20	1	AR136236	ACCESSION:AR136236
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c	64	20	0.6	20	1	AR136238	ACCESSION:AR136238
c	65	20	0.6	20	1	AR136239	ACCESSION:AR136239
c	66	20	0.6	20	1	AR136240	ACCESSION:AR136240
c	67	20	0.6	20	1	AR136241	ACCESSION:AR136241
c	68	20	0.6	20	1	AR136242	ACCESSION:AR136242
c	69	20	0.6	20	1	AR136243	ACCESSION:AR136243
c	70	20	0.6	20	1	AR136244	ACCESSION:AR136244
c	71	20	0.6	20	1	AR136245	ACCESSION:AR136245
c	72	20	0.6	20	1	AR136246	ACCESSION:AR136246
c	73	20	0.6	20	1	AR136247	ACCESSION:AR136247
c	74	20	0.6	20	1	AR136248	ACCESSION:AR136248
c	75	20	0.6	20	1	AR136249	ACCESSION:AR136249
c	76	20	0.6	20	1	AR136250	ACCESSION:AR136250
c	77	20	0.6	20	1	AR136251	ACCESSION:AR136251
c	78	20	0.6	20	1	AR136252	ACCESSION:AR136252
c	79	20	0.6	20	1	AR136253	ACCESSION:AR136253
c	80	20	0.6	20	1	AR136254	ACCESSION:AR136254
c	81	20	0.6	20	1	AR136255	ACCESSION:AR136255
c	82	20	0.6	20	1	AR136256	ACCESSION:AR136256
c	83	20	0.6	20	1	AR136257	ACCESSION:AR136257
c	84	20	0.6	20	1	AR136258	ACCESSION:AR136258
c	85	20	0.6	20	1	AR136259	ACCESSION:AR136259
c	86	20	0.6	20	1	AR136260	ACCESSION:AR136260
c	87	20	0.6	20	1	AR136261	ACCESSION:AR136261
c	88	20	0.6	20	1	AR136262	ACCESSION:AR136262
c	89	20	0.6	20	1	AR136263	ACCESSION:AR136263
c	90	20	0.6	20	1	AR136264	ACCESSION:AR136264
c	91	20	0.6	20	1	AR136265	ACCESSION:AR136265
c	92	20	0.6	20	1	AR136266	ACCESSION:AR136266
c	93	20	0.6	20	1	AR136267	ACCESSION:AR136267
c	94	20	0.6	20	1	AR136268	ACCESSION:AR136268
c	95	20	0.6	20	1	BD247691	ACCESSION:BD247691
c	96	20	0.6	20	1	BD247692	ACCESSION:BD247692
c	97	20	0.6	20	1	BD247693	ACCESSION:BD247693
c	98	20	0.6	20	1	BD247694	ACCESSION:BD247694
c	99	20	0.6	20	1	BD247695	ACCESSION:BD247695
c	100	20	0.6	20	1	BD247696	ACCESSION:BD247696
c	101	20	0.6	20	1	BD247697	ACCESSION:BD247697
c	102	20	0.6	20	1	BD247698	ACCESSION:BD247698
c	103	20	0.6	20	1	BD247699	ACCESSION:BD247699
c	104	20	0.6	20	1	BD247700	ACCESSION:BD247700
c	105	20	0.6	20	1	BD247701	ACCESSION:BD247701
c	106	20	0.6	20	1	BD247702	ACCESSION:BD247702

c 107	20	0.6	20	1	BD247703	ACCESSION:BD247703
c 108	20	0.6	20	1	BD247704	ACCESSION:BD247704
c 109	20	0.6	20	1	BD247705	ACCESSION:BD247705
c 110	20	0.6	20	1	BD247706	ACCESSION:BD247706
c 111	20	0.6	20	1	BD247707	ACCESSION:BD247707
c 112	20	0.6	20	1	BD247708	ACCESSION:BD247708
c 113	20	0.6	20	1	BD247709	ACCESSION:BD247709
c 114	20	0.6	20	1	BD247710	ACCESSION:BD247710
c 115	20	0.6	20	1	BD247711	ACCESSION:BD247711
c 116	20	0.6	20	1	BD247712	ACCESSION:BD247712
c 117	20	0.6	20	1	BD247713	ACCESSION:BD247713
c 118	20	0.6	20	1	BD247714	ACCESSION:BD247714
c 119	20	0.6	20	1	BD247715	ACCESSION:BD247715
c 120	20	0.6	20	1	BD247716	ACCESSION:BD247716
c 121	20	0.6	20	1	BD247717	ACCESSION:BD247717
c 122	20	0.6	20	1	BD247718	ACCESSION:BD247718
c 123	20	0.6	20	1	BD247719	ACCESSION:BD247719
c 124	20	0.6	20	1	BD247720	ACCESSION:BD247720
c 125	20	0.6	20	1	BD247721	ACCESSION:BD247721
c 126	20	0.6	20	1	BD247722	ACCESSION:BD247722
c 127	20	0.6	20	1	BD247723	ACCESSION:BD247723
128	20	0.6	20	1	AX801571	ACCESSION:AX801571
129	20	0.6	20	1	AX805803	ACCESSION:AX805803
c 130	18.8	0.6	22	1	AR300438	ACCESSION:AR300438
c 131	18.8	0.6	22	1	AX083942	ACCESSION:AX083942
c 132	18.4	0.6	20	1	AR136212	ACCESSION:AR136212
c 133	18.4	0.6	20	1	AR136269	ACCESSION:AR136269
c 134	18.4	0.6	20	1	AR136272	ACCESSION:AR136272
c 135	18.4	0.6	20	1	BD247667	ACCESSION:BD247667
c 136	18.4	0.6	20	1	BD247724	ACCESSION:BD247724
c 137	18.4	0.6	20	1	BD247727	ACCESSION:BD247727
138	18.4	0.6	20	1	AR300437	ACCESSION:AR300437
139	18.4	0.6	20	1	AX083941	ACCESSION:AX083941
140	18.4	0.6	22	1	I05460	ACCESSION:I05460
c 141	18	0.6	18	1	A89366	ACCESSION:A89366
c 142	18	0.6	18	1	A89367	ACCESSION:A89367
c 143	18	0.6	18	1	A89368	ACCESSION:A89368
c 144	18	0.6	18	1	A89369	ACCESSION:A89369
c 145	18	0.6	18	1	A89370	ACCESSION:A89370
c 146	18	0.6	18	1	A89371	ACCESSION:A89371
147	18	0.6	18	1	I39665	ACCESSION:I39665
148	18	0.6	18	1	I39667	ACCESSION:I39667
149	18	0.6	18	1	I39669	ACCESSION:I39669
150	18	0.6	18	1	I39671	ACCESSION:I39671
151	18	0.6	18	1	I39769	ACCESSION:I39769
152	18	0.6	18	1	I39781	ACCESSION:I39781
153	18	0.6	18	1	AX635768	ACCESSION:AX635768
154	18	0.6	18	1	AX635770	ACCESSION:AX635770
155	18	0.6	18	1	AX635772	ACCESSION:AX635772
156	18	0.6	18	1	AX635774	ACCESSION:AX635774
c 157	18	0.6	18	1	BD066879	ACCESSION:BD066879
c 158	18	0.6	18	1	BD066880	ACCESSION:BD066880
c 159	18	0.6	18	1	BD066881	ACCESSION:BD066881
c 160	18	0.6	18	1	BD066882	ACCESSION:BD066882
c 161	18	0.6	18	1	BD066883	ACCESSION:BD066883
c 162	18	0.6	18	1	BD066884	ACCESSION:BD066884

ALIGNMENTS

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RESULT 1
AR032602
LOCUS       AR032602                  50 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 214 from patent US 5869241.
ACCESSION   AR032602
VERSION     AR032602.1  GI:5948207
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Edwards,C.A., Cantor,C.R., Andrews,B.M., Turin,L.M. and Fry,K.E.
  TITLE     Method of determining DNA sequence preference of a DNA-binding
            molecule
  JOURNAL   Patent: US 5869241-A 214 09-FEB-1999;
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
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  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 2
I29342
LOCUS       I29342                    50 bp    DNA     linear   PAT 06-FEB-1997
DEFINITION  Sequence 214 from patent US 5578444.
ACCESSION   I29342
VERSION     I29342.1  GI:1820133
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Edwards,C.A., Cantor,C.R., Andrews,B.M., Turin,L.M. and Fry,K.E.
  TITLE     Sequence-directed DNA-binding molecules compositions and methods
  JOURNAL   Patent: US 5578444-A 214 26-NOV-1996;
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
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Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 3
I91016
LOCUS       I91016                    50 bp    DNA     linear   PAT 01-DEC-1998
DEFINITION  Sequence 214 from patent US 5726014.
ACCESSION   I91016
VERSION     I91016.1  GI:3935486
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Edwards,C.A., Cantor,C.R., Andrews,B.M. and Turin,L.M.
  TITLE     Screening assay for the detection of DNA-binding molecules
  JOURNAL   Patent: US 5726014-A 214 10-MAR-1998;
FEATURES             Location/Qualifiers
     source          1. .50
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                     /mol_type="unassigned DNA"

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
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Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50
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RESULT 4
AR209266
LOCUS       AR209266                  50 bp    DNA     linear   PAT 20-JUN-2002
DEFINITION  Sequence 214 from patent US 6384208.
ACCESSION   AR209266
VERSION     AR209266.1  GI:21510640
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 50)
  AUTHORS   Edwards,C.A., Cantor,C.R., Andrews,B.M., Turin,L.M. and Fry,K.E.
  TITLE     Sequence directed DNA binding molecules compositions and methods
  JOURNAL   Patent: US 6384208-A 214 07-MAY-2002;
FEATURES             Location/Qualifiers
     source          1. .50
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 2.3;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 5
I05454
LOCUS       I05454                    48 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 6 from Patent EP 0267779.
ACCESSION   I05454
VERSION     I05454.1  GI:590960
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 48)
  AUTHORS   Coffman,R., Yokota,T., Crute,J.J., Lee,F. and Arai,K.-i.
  TITLE     Human pleiotropic immune factor and muteins thereof
  JOURNAL   Patent: EP 0267779-A2 6 18-MAY-1988;
FEATURES             Location/Qualifiers
     source          1. .48
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.4%;  Score 46.4;  DB 1;  Length 48;
  Best Local Similarity   97.9%;  Pred. No. 3.9;
  Matches   47;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1925 CTGGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAAGACTATTCAAA 1972
              || |||||||||||||||||||||||||||||||||||||||||||||
Db          1 CTAGAGAGTCAAACTGTGCAAGGGGGTACTGTGGAAAGACTATTCAAA 48


RESULT 6
I71456/c
LOCUS       I71456                    47 bp    DNA     linear   PAT 03-APR-1998
DEFINITION  Sequence 2 from patent US 5681936.
ACCESSION   I71456
VERSION     I71456.1  GI:3007591
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 47)
  AUTHORS   Nicholson,D.
  TITLE     Method of purification of recombinant human interleukin-5
  JOURNAL   Patent: US 5681936-A 2 28-OCT-1997;
FEATURES             Location/Qualifiers
     source          1. .47
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.4%;  Score 45.4;  DB 1;  Length 47;
  Best Local Similarity   97.9%;  Pred. No. 4.4;
  Matches   46;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        551 CCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTGGAGCTGCC 597
              |||||||||||||||||||||||||||||||||||||||||||||
Db         47 CTATGAGGATGCTTCTGCATTTGAGTTTGCTAGCTCTTGGAGCTGCC 1


RESULT 7
I71457
LOCUS       I71457                    43 bp    DNA     linear   PAT 03-APR-1998
DEFINITION  Sequence 3 from patent US 5681936.
ACCESSION   I71457
VERSION     I71457.1  GI:3007592
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 43)
  AUTHORS   Nicholson,D.
  TITLE     Method of purification of recombinant human interleukin-5
  JOURNAL   Patent: US 5681936-A 3 28-OCT-1997;
FEATURES             Location/Qualifiers
     source          1. .43
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                     /mol_type="unassigned DNA"

  Query Match             1.3%;  Score 43;  DB 1;  Length 43;
  Best Local Similarity   100.0%;  Pred. No. 5.8;
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Qy        586 CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCA 628
              |||||||||||||||||||||||||||||||||||||||||||
Db          1 CTTGGAGCTGCCTACGTGTATGCCATCCCCACAGAAATTCCCA 43


RESULT 8
BD211601/c
LOCUS       BD211601                  42 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Canine and feline immunoregulatory proteins, nucleic acid molecules
            and method of using the same.
ACCESSION   BD211601
VERSION     BD211601.1  GI:33021371
KEYWORDS    JP 2002516104-A/107.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 42)
  AUTHORS   Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
  TITLE     Canine and feline immunoregulatory proteins, nucleic acid molecules
            and method of using the same
  JOURNAL   Patent: JP 2002516104-A 107 04-JUN-2002;
            HESKA CORP
COMMENT     OS   Artificial Sequence
            PN   JP 2002516104-A/107
            PD   04-JUN-2002
            PF   28-MAY-1999 JP 2000551002
            PR   29-MAY-1998 US    60/087306
            PI   GEKKEE SIM,SHUMIN YANG,MATTHEW J DREITZ,RAMANI S WONDERLING PC
              C12N15/09,A61K31/7088,A61K38/00,A61K38/21,A61K39/00,A61K39/395,
            PC   A61K39/395,
            PC   A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
            PC   C07K14/54,
            PC   C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10, PC
              G01N33/15,
            PC   G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC
            Description of Artificial Sequence: Synthetic Primer FH   Key
                 Location/Qualifiers
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            FT                   /organism='Artificial Sequence'.
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FEATURES             Location/Qualifiers
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  Query Match             1.3%;  Score 41.2;  DB 1;  Length 42;
  Best Local Similarity   95.2%;  Pred. No. 7.5;
  Matches   40;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
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Db         42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1


RESULT 9
AR241579/c
LOCUS       AR241579                  42 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 135 from patent US 6471957.
ACCESSION   AR241579
VERSION     AR241579.1  GI:27287288
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 42)
  AUTHORS   Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
  TITLE     Canine IL-4 immunoregulatory proteins and uses thereof
  JOURNAL   Patent: US 6471957-A 135 29-OCT-2002;
FEATURES             Location/Qualifiers
     source          1. .42
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                     /mol_type="genomic DNA"

  Query Match             1.3%;  Score 41.2;  DB 1;  Length 42;
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  Matches   40;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
              ||||||||||||||||||||||||:|||||:||||||||||||
Db         42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1


RESULT 10
AR254535/c
LOCUS       AR254535                  42 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 135 from patent US 6482403.
ACCESSION   AR254535
VERSION     AR254535.1  GI:27303423
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 42)
  AUTHORS   Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
  TITLE     Caniney IL-13 immunoregulatory proteins and uses thereof
  JOURNAL   Patent: US 6482403-A 135 19-NOV-2002;
FEATURES             Location/Qualifiers
     source          1. .42
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             1.3%;  Score 41.2;  DB 1;  Length 42;
  Best Local Similarity   95.2%;  Pred. No. 7.5;
  Matches   40;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
              ||||||||||||||||||||||||:|||||:||||||||||||
Db         42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1


RESULT 11
I39775
LOCUS       I39775                    34 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 48 from patent US 5616490.
ACCESSION   I39775
VERSION     I39775.1  GI:2084255
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 34)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 48 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .34
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.1%;  Score 34;  DB 1;  Length 34;
  Best Local Similarity   100.0%;  Pred. No. 18;
  Matches   34;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2136 AGACGGAGAGTAAACCAATTCCTAGACTACCTGC 2169
              ||||||||||||||||||||||||||||||||||
Db          1 AGACGGAGAGTAAACCAATTCCTAGACTACCTGC 34


RESULT 12
I71458/c
LOCUS       I71458                    35 bp    DNA     linear   PAT 03-APR-1998
DEFINITION  Sequence 4 from patent US 5681936.
ACCESSION   I71458
VERSION     I71458.1  GI:3007593
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 35)
  AUTHORS   Nicholson,D.
  TITLE     Method of purification of recombinant human interleukin-5
  JOURNAL   Patent: US 5681936-A 4 28-OCT-1997;
FEATURES             Location/Qualifiers
     source          1. .35
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.0%;  Score 33.4;  DB 1;  Length 35;
  Best Local Similarity   97.1%;  Pred. No. 21;
  Matches   34;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        598 TACGTGTATGCCATCCCCACAGAAATTCCCACAAG 632
              ||||||||||||||||||||||||||||||||| ||
Db         35 TACGTGTATGCCATCCCCACAGAAATTCCCACTAG 1


RESULT 13
I71455
LOCUS       I71455                    39 bp    DNA     linear   PAT 03-APR-1998
DEFINITION  Sequence 1 from patent US 5681936.
ACCESSION   I71455
VERSION     I71455.1  GI:3007590
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 39)
  AUTHORS   Nicholson,D.
  TITLE     Method of purification of recombinant human interleukin-5
  JOURNAL   Patent: US 5681936-A 1 28-OCT-1997;
FEATURES             Location/Qualifiers
     source          1. .39
                     /organism="unknown"
                     /mol_type="unassigned DNA"
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  Query Match             1.0%;  Score 33.4;  DB 1;  Length 39;
  Best Local Similarity   97.1%;  Pred. No. 23;
  Matches   34;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        551 CCATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT 585
              | ||||||||||||||||||||||||||||||||||
Db          5 CTATGAGGATGCTTCTGCATTTGAGTTTGCTAGCT 39


RESULT 14
A56954/c
LOCUS       A56954                    33 bp    DNA     linear   PAT 03-MAR-1998
DEFINITION  Sequence 12 from Patent WO9629091.
ACCESSION   A56954
VERSION     A56954.1  GI:3712937
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1
  AUTHORS   Stanley,M.A. and Scarpini,C.G.
  TITLE     TREATMENT OF PAPILLOMAVIRUS-ASSOCIATED LESIONS USING INTERLEUKIN-12
  JOURNAL   Patent: WO 9629091-A 12 26-SEP-1996;
            UNIV CAMBRIDGE TECH (GB)
COMMENT     Other publication AU 5151596 961008.
FEATURES             Location/Qualifiers
     source          1. .33
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             1.0%;  Score 33;  DB 1;  Length 33;
  Best Local Similarity   100.0%;  Pred. No. 21;
  Matches   33;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2184 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
              |||||||||||||||||||||||||||||||||
Db         33 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 1


RESULT 15
AR080304/c
LOCUS       AR080304                  33 bp    DNA     linear   PAT 31-AUG-2000
DEFINITION  Sequence 10 from patent US 5968755.
ACCESSION   AR080304
VERSION     AR080304.1  GI:10007039
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 33)
  AUTHORS   Roederer,M., Rabin,R., Herzenberg,L.A. and Herzenberg,L.A.
  TITLE     Methods for determining T-cell profiles of immunocompromised
            subjects
  JOURNAL   Patent: US 5968755-A 10 19-OCT-1999;
FEATURES             Location/Qualifiers
     source          1. .33
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.0%;  Score 33;  DB 1;  Length 33;
  Best Local Similarity   100.0%;  Pred. No. 21;
  Matches   33;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2184 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
              |||||||||||||||||||||||||||||||||
Db         33 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 1


RESULT 16
I39778
LOCUS       I39778                    33 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 51 from patent US 5616490.
ACCESSION   I39778
VERSION     I39778.1  GI:2084258
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 33)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 51 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .33
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             1.0%;  Score 33;  DB 1;  Length 33;
  Best Local Similarity   100.0%;  Pred. No. 21;
  Matches   33;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2344 ATTTCAGGCATACTGACACTTTGCCAGAAAGCA 2376
              |||||||||||||||||||||||||||||||||
Db          1 ATTTCAGGCATACTGACACTTTGCCAGAAAGCA 33


RESULT 17
BD170558
LOCUS       BD170558                  30 bp    DNA     linear   PAT 17-JAN-2003
DEFINITION  Method of gene enrichment.
ACCESSION   BD170558
VERSION     BD170558.1  GI:27876370
KEYWORDS    WO 0250268-A/5.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 30)
  AUTHORS   Nakazato,H.
  TITLE     Method of gene enrichment
  JOURNAL   Patent: WO 0250268-A 5 27-JUN-2002;
            SUNTORY LTD,SUNTORY BIOMEDICAL RESEARCH LTD,HIROSHI NAKAZATO
COMMENT     OS   Artificial Sequence
            PN   WO 0250268-A/5
            PD   27-JUN-2002
            PF   18-DEC-2001 WO 2001JP011113
            PR   19-DEC-2000 JP 00P   386025
            PI   HIROSHI NAKAZATO
            PC   C12N15/10,C12Q1/68,C12M1/00
            CC   Hf
            FH   Key             Location/Qualifiers
            FT   source          1. .30
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .30
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.9%;  Score 30;  DB 1;  Length 30;
  Best Local Similarity   100.0%;  Pred. No. 29;
  Matches   30;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1600 ACTTTTTGAAAATTTTATCTTAATATGTGG 1629
              ||||||||||||||||||||||||||||||
Db          1 ACTTTTTGAAAATTTTATCTTAATATGTGG 30


RESULT 18
I39780
LOCUS       I39780                    29 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 53 from patent US 5616490.
ACCESSION   I39780
VERSION     I39780.1  GI:2084260
KEYWORDS    .
SOURCE      Unknown.
```

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  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 29)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 53 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .29
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.9%;  Score 29;  DB 1;  Length 29;
  Best Local Similarity   100.0%;  Pred. No. 33;
  Matches   29;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2433 CAAAATTGATATACTTTTTTCTTATTTAA 2461
              ||||||||||||||||||||||||||||||
Db          1 CAAAATTGATATACTTTTTTCTTATTTAA 29


RESULT 19
AR089936/c
LOCUS       AR089936                  28 bp    DNA     linear   PAT 07-SEP-2000
DEFINITION  Sequence 56 from patent US 5994076.
ACCESSION   AR089936
VERSION     AR089936.1  GI:10016691
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 28)
  AUTHORS   Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
  TITLE     Methods of assaying differential expression
  JOURNAL   Patent: US 5994076-A 56 30-NOV-1999;
FEATURES             Location/Qualifiers
     source          1. .28
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
              ||||||||||||||||||||||||||||
Db         28 GGGAATAGGCACACTGGAGAGTCAAACT 1


RESULT 20
AR196971/c
LOCUS       AR196971                  28 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 56 from patent US 6352829.
ACCESSION   AR196971
VERSION     AR196971.1  GI:20246820
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 28)
  AUTHORS   Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
  TITLE     Methods of assaying differential expression
  JOURNAL   Patent: US 6352829-A 56 05-MAR-2002;
FEATURES             Location/Qualifiers
     source          1. .28
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
              ||||||||||||||||||||||||||||
Db         28 GGGAATAGGCACACTGGAGAGTCAAACT 1


RESULT 21
AR259125/c
LOCUS       AR259125                  28 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 56 from patent US 6489455.
ACCESSION   AR259125
VERSION     AR259125.1  GI:27309636
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 28)
  AUTHORS   Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
  TITLE     Methods of assaying differential expression
  JOURNAL   Patent: US 6489455-A 56 03-DEC-2002;
FEATURES             Location/Qualifiers
     source          1. .28
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
              ||||||||||||||||||||||||||||
Db         28 GGGAATAGGCACACTGGAGAGTCAAACT 1


RESULT 22
AR300439
LOCUS       AR300439                  28 bp    DNA     linear   PAT 12-JUN-2003
DEFINITION  Sequence 5 from patent US 6537781.
ACCESSION   AR300439
VERSION     AR300439.1  GI:31687878
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 28)
  AUTHORS   Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.P.
  TITLE     Methods and compositions concerning canine interleukin 5
  JOURNAL   Patent: US 6537781-A 5 25-MAR-2003;
FEATURES             Location/Qualifiers
     source          1. .28
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        440 CTGATTGTTAGAAATTATTCATTTCCTC 467
              ||||||||||||||||||||||||||||
Db          1 CTGATTGTTAGAAATTATTCATTTCCTC 28


RESULT 23
AX083943
LOCUS       AX083943                  28 bp    DNA     linear   PAT 22-JUN-2001
DEFINITION  Sequence 5 from Patent WO0111049.
ACCESSION   AX083943
VERSION     AX083943.1  GI:13185505
KEYWORDS    .
SOURCE      Canis familiaris (dog)
  ORGANISM  Canis familiaris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
REFERENCE   1
  AUTHORS   Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.P.
  TITLE     Methods and compositions concerning canine interleukin 5
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  JOURNAL   Patent: WO 0111049-A 5 15-FEB-2001;
            IDEXX LABORATORIES, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .28
                     /organism="Canis familiaris"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9615"
                     /note="PCR primer"

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 37;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        440 CTGATTGTTAGAAATTATTCATTTCCTC 467
              ||||||||||||||||||||||||||||
Db          1 CTGATTGTTAGAAATTATTCATTTCCTC 28


RESULT 24
A39732/c
LOCUS       A39732                    27 bp    DNA     linear   PAT 05-MAR-1997
DEFINITION  Sequence 6 from Patent WO9417773.
ACCESSION   A39732
VERSION     A39732.1  GI:2295986
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Goldman,M., Velu,T., Abramowicz,D., Bruyns,C., Capel,P.,
            Delvaux,A., Donckier,V., Gerard,C., Marchant,A., Pradier,O.,
            Schandene,L. and Willems,F.
  TITLE     USE OF A PHARMACEUTICAL COMPOSITION COMPRISING AN EFFECTIVE AMOUNT
            OF INTERLEUKIN-10, AN ANALOG AND/OR AN AGONIST OF INTERLEUKIN-10
  JOURNAL   Patent: WO 9417773-A 6 18-AUG-1994;
            GOLDMAN MICHEL (BE)
COMMENT     Other publication AU 6000894 940829
            Other publication CA 2155109 940818.
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.8%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 41;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1981 CTTAATAAAGAAATACATTGACGGCCA 2007
              |||||||||||||||||||||||||||
Db         27 CTTAATAAAGAAATACATTGACGGCCA 1


RESULT 25
I39768
LOCUS       I39768                    27 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 41 from patent US 5616490.
ACCESSION   I39768
VERSION     I39768.1  GI:2084248
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 41 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 41;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        569 ATTTGAGTTTGCTAGCTCTTGGAGCTG 595
              ||||||||||||||||||||||||||||
Db          1 ATTTGAGTTTGCTAGCTCTTGGAGCTG 27


RESULT 26
BD170559/c
LOCUS       BD170559                  27 bp    DNA     linear   PAT 17-JAN-2003
DEFINITION  Method of gene enrichment.
ACCESSION   BD170559
VERSION     BD170559.1  GI:27876371
KEYWORDS    WO 0250268-A/6.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Nakazato,H.
  TITLE     Method of gene enrichment
  JOURNAL   Patent: WO 0250268-A 6 27-JUN-2002;
            SUNTORY LTD,SUNTORY BIOMEDICAL RESEARCH LTD,HIROSHI NAKAZATO
COMMENT     OS   Artificial Sequence
            PN   WO 0250268-A/6
            PD   27-JUN-2002
            PF   18-DEC-2001 WO 2001JP011113
            PR   19-DEC-2000 JP 00P   386025
            PI   HIROSHI NAKAZATO
            PC   C12N15/10,C12Q1/68,C12M1/00
            CC   Hr
            FH   Key             Location/Qualifiers
            FT   source          1. .27
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.8%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 41;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1981 CTTAATAAAGAAATACATTGACGGCCA 2007
              |||||||||||||||||||||||||||
Db         27 CTTAATAAAGAAATACATTGACGGCCA 1


RESULT 27
AX801573
LOCUS       AX801573                  29 bp    DNA     linear   PAT 24-NOV-2003
DEFINITION  Sequence 9 from Patent EP1329506.
ACCESSION   AX801573
VERSION     AX801573.1  GI:38500545
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Stordeur,P. and Goldman,M.
  TITLE     Method to quantify in vivo rna levels
  JOURNAL   Patent: EP 1329506-A 9 23-JUL-2003;
            Cypro S.A. (BE)
FEATURES             Location/Qualifiers
     source          1. .29
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide"
     misc_feature    1
                     /note="N = 6Fam"
     misc_feature    29
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```
                     /note="N = Tamra-p"

  Query Match             0.8%;  Score 27;  DB 1;  Length 29;
  Best Local Similarity   100.0%;  Pred. No. 44;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        612 CCCCACAGAAATTCCCACAAGTGCATT 638
              ||||||||||||||||||||||||||
Db          2 CCCCACAGAAATTCCCACAAGTGCATT 28


RESULT 28
AX805805
LOCUS       AX805805                  29 bp    DNA     linear   PAT 25-NOV-2003
DEFINITION  Sequence 9 from Patent WO03060119.
ACCESSION   AX805805
VERSION     AX805805.1  GI:38522716
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Stordeur,P. and Goldman,M.
  TITLE     Method to determine in vivo nucleic acid levels
  JOURNAL   Patent: WO 03060119-A 9 24-JUL-2003;
            Universite Libre de Bruxelles (BE)
FEATURES             Location/Qualifiers
     source          1. .29
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide"
     misc_feature    1
                     /note="N = 6Fam"
     misc_feature    29
                     /note="N = Tamra-p"

  Query Match             0.8%;  Score 27;  DB 1;  Length 29;
  Best Local Similarity   100.0%;  Pred. No. 44;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        612 CCCCACAGAAATTCCCACAAGTGCATT 638
              ||||||||||||||||||||||||||
Db          2 CCCCACAGAAATTCCCACAAGTGCATT 28


RESULT 29
AR089935
LOCUS       AR089935                  26 bp    DNA     linear   PAT 07-SEP-2000
DEFINITION  Sequence 55 from patent US 5994076.
ACCESSION   AR089935
VERSION     AR089935.1  GI:10016690
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 26)
  AUTHORS   Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
  TITLE     Methods of assaying differential expression
  JOURNAL   Patent: US 5994076-A 55 30-NOV-1999;
FEATURES             Location/Qualifiers
     source          1. .26
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 26;  DB 1;  Length 26;
  Best Local Similarity   100.0%;  Pred. No. 46;
  Matches   26;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        543 TTTCAGAGCCATGAGGATGCTTCTGC 568
              ||||||||||||||||||||||||||
Db          1 TTTCAGAGCCATGAGGATGCTTCTGC 26


RESULT 30
AR196970
LOCUS       AR196970                  26 bp    DNA     linear   PAT 20-APR-2002
DEFINITION  Sequence 55 from patent US 6352829.
ACCESSION   AR196970
VERSION     AR196970.1  GI:20246819
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 26)
  AUTHORS   Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
  TITLE     Methods of assaying differential expression
  JOURNAL   Patent: US 6352829-A 55 05-MAR-2002;
FEATURES             Location/Qualifiers
     source          1. .26
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.8%;  Score 26;  DB 1;  Length 26;
  Best Local Similarity   100.0%;  Pred. No. 46;
  Matches   26;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        543 TTTCAGAGCCATGAGGATGCTTCTGC 568
              ||||||||||||||||||||||||||
Db          1 TTTCAGAGCCATGAGGATGCTTCTGC 26


RESULT 31
AR259124
LOCUS       AR259124                  26 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 55 from patent US 6489455.
ACCESSION   AR259124
VERSION     AR259124.1  GI:27309635
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 26)
  AUTHORS   Chenchik,A., Jokhadze,G. and Bibilashvilli,R.
  TITLE     Methods of assaying differential expression
  JOURNAL   Patent: US 6489455-A 55 03-DEC-2002;
FEATURES             Location/Qualifiers
     source          1. .26
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.8%;  Score 26;  DB 1;  Length 26;
  Best Local Similarity   100.0%;  Pred. No. 46;
  Matches   26;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        543 TTTCAGAGCCATGAGGATGCTTCTGC 568
              ||||||||||||||||||||||||||
Db          1 TTTCAGAGCCATGAGGATGCTTCTGC 26


RESULT 32
BD211602/c
LOCUS       BD211602                  27 bp    DNA     linear   PAT 17-JUL-2002
DEFINITION  Canine and feline immunoregulatory proteins, nucleic acid molecules
            and method of using the same.
ACCESSION   BD211602
VERSION     BD211602.1  GI:33021372
KEYWORDS    JP 2002516104-A/108.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Sim,G., Yang,S., Dreitz,M.J. and Wonderling,R.S.
  TITLE     Canine and feline immunoregulatory proteins, nucleic acid molecules
            and method of using the same
  JOURNAL   Patent: JP 2002516104-A 108 04-JUN-2002;
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            HESKA CORP
COMMENT     OS   Artificial Sequence
            PN   JP 2002516104-A/108
            PD   04-JUN-2002
            PF   28-MAY-1999 JP 2000551002
            PR   29-MAY-1998 US    60/087306
            PI   GEKKEE SIM,SHUMIN YANG,MATTHEW J DREITZ,RAMANI S WONDERLING PC
              C12N15/09,A61K31/7088,A61K38/00,A61K38/21,A61K39/00,A61K39/395,
            PC   A61K39/395,
            PC   A61K45/00,A61K48/00,A61P37/02,A61P37/04,C07K14/475,C07K14/535,
            PC   C07K14/54,
            PC   C07K14/56,C07K14/705,C07K16/24,C07K16/28,C12N1/21,C12N5/10, PC
              G01N33/15,
            PC   G01N33/50,C12N15/00,A61K37/02,A61K37/66,C12N5/00 CC
            Description of Artificial Sequence: Synthetic Primer FH   Key
                 Location/Qualifiers
            FT   source          1. .27
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .27
                      /organism="synthetic construct"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match              0.8%;  Score 25.4;  DB 1;  Length 27;
  Best Local Similarity   85.2%;  Pred. No. 52;
  Matches   23;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
              ||||||||||:||||::|||:|||||
Db         27 TGAGAATGAGGSCCAASMAAGRGTCAG 1


RESULT 33
AR241580/c
LOCUS       AR241580                  27 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 136 from patent US 6471957.
ACCESSION   AR241580
VERSION     AR241580.1  GI:27287289
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
  TITLE     Canine IL-4 immunoregulatory proteins and uses thereof
  JOURNAL   Patent: US 6471957-A 136 29-OCT-2002;
FEATURES              Location/Qualifiers
     source           1. .27
                      /organism="unknown"
                      /mol_type="genomic DNA"

  Query Match              0.8%;  Score 25.4;  DB 1;  Length 27;
  Best Local Similarity   85.2%;  Pred. No. 52;
  Matches   23;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
              ||||||||||:||||::|||:|||||
Db         27 TGAGAATGAGGSCCAASMAAGRGTCAG 1


RESULT 34
AR254536/c
LOCUS       AR254536                  27 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 136 from patent US 6482403.
ACCESSION   AR254536
VERSION     AR254536.1  GI:27303424
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Sim,G.-K., Yang,S., Dreitz,M.J. and Wonderling,R.S.
  TITLE     Caniney IL-13 immunoregulatory proteins and uses thereof
  JOURNAL   Patent: US 6482403-A 136 19-NOV-2002;
FEATURES              Location/Qualifiers
     source           1. .27
                      /organism="unknown"
                      /mol_type="genomic DNA"

  Query Match              0.8%;  Score 25.4;  DB 1;  Length 27;
  Best Local Similarity   85.2%;  Pred. No. 52;
  Matches   23;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
              ||||||||||:||||::|||:|||||
Db         27 TGAGAATGAGGSCCAASMAAGRGTCAG 1


RESULT 35
A39731
LOCUS       A39731                    25 bp    DNA     linear   PAT 05-MAR-1997
DEFINITION  Sequence 5 from Patent WO9417773.
ACCESSION   A39731
VERSION     A39731.1  GI:2295985
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 25)
  AUTHORS   Goldman,M., Velu,T., Abramowicz,D., Bruyns,C., Capel,P.,
            Delvaux,A., Donckier,V., Gerard,C., Marchant,A., Pradier,O.,
            Schandene,L. and Willems,F.
  TITLE     USE OF A PHARMACEUTICAL COMPOSITION COMPRISING AN EFFECTIVE AMOUNT
            OF INTERLEUKIN-10, AN ANALOG AND/OR AN AGONIST OF INTERLEUKIN-10
  JOURNAL   Patent: WO 9417773-A 5 18-AUG-1994;
            GOLDMAN MICHEL (BE)
COMMENT     Other publication AU 6000894 940829
            Other publication CA 2155109 940818.
FEATURES              Location/Qualifiers
     source           1. .25
                      /organism="unidentified"
                      /mol_type="unassigned DNA"
                      /db_xref="taxon:32644"

  Query Match              0.8%;  Score 25;  DB 1;  Length 25;
  Best Local Similarity  100.0%;  Pred. No. 51;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        561 GCTTCTGCATTTGAGTTTGCTAGCT 585
              |||||||||||||||||||||||||
Db          1 GCTTCTGCATTTGAGTTTGCTAGCT 25


RESULT 36
A86923
LOCUS       A86923                    24 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 14 from Patent WO9838306.
ACCESSION   A86923
VERSION     A86923.1  GI:6735707
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Dolganov,G.
  TITLE     TRANSCRIPTS ENCODING IMMUNOMODULATORY POLYPEPTIDES
  JOURNAL   Patent: WO 9838306-A 14 03-SEP-1998;
            GENELABS TECH INC (US)
FEATURES              Location/Qualifiers
     source           1. .24
                      /organism="unidentified"
                      /mol_type="unassigned DNA"
                      /isolate="PRIMER IL5-1"
                      /db_xref="taxon:32644"
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  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
             ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 37
AR048335
LOCUS       AR048335                 24 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 14 from patent US 5821091.
ACCESSION   AR048335
VERSION     AR048335.1  GI:5970678
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Dolganov,G.
  TITLE     Method of identifying activated T-cells
  JOURNAL   Patent: US 5821091-A 14 13-OCT-1998;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
             ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 38
AR079226
LOCUS       AR079226                 24 bp    DNA     linear   PAT 31-AUG-2000
DEFINITION  Sequence 14 from patent US 5965427.
ACCESSION   AR079226
VERSION     AR079226.1  GI:10005972
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Dolganov,G. and Novikov,A.
  TITLE     Human RAD50 gene and methods of use thereof
  JOURNAL   Patent: US 5965427-A 14 12-OCT-1999;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
             ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 39
AR309657
LOCUS       AR309657                 24 bp    DNA     linear   PAT 12-JUN-2003
DEFINITION  Sequence 14 from patent US 6555666.
ACCESSION   AR309657
VERSION     AR309657.1  GI:31701734
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 24)
  AUTHORS   Dolganov,G.
  TITLE     Transcripts encoding immunomodulatory polypeptides
  JOURNAL   Patent: US 6555666-A 14 29-APR-2003;
FEATURES             Location/Qualifiers
     source          1. .24
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 57;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
             ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 40
I39774
LOCUS       I39774                   23 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 47 from patent US 5616490.
ACCESSION   I39774
VERSION     I39774.1  GI:2084254
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 23)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 47 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 63;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1959 AAAGACTATTCAAAAACTTGTCC 1981
             |||||||||||||||||||||||
Db          1 AAAGACTATTCAAAAACTTGTCC 23


RESULT 41
AX643972/c
LOCUS       AX643972                 23 bp    DNA     linear   PAT 24-FEB-2003
DEFINITION  Sequence 10 from Patent WO02061140.
ACCESSION   AX643972
VERSION     AX643972.1  GI:28551859
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Brown,D. and Winkler,M.M.
  TITLE     Competitive population normalization for comparative analysis of
            nucleic acid samples
  JOURNAL   Patent: WO 02061140-A 10 08-AUG-2002;
            AMBION, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"

  Query Match             0.7%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 63;
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  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2249 GGAGGAGAAGGACATTTTACTGC 2271
              |||||||||||||||||||||||
Db         23 GGAGGAGAAGGACATTTTACTGC 1


RESULT 42
AX644889/c
LOCUS       AX644889                  23 bp    DNA     linear   PAT 27-FEB-2003
DEFINITION  Sequence 10 from Patent WO02061145.
ACCESSION   AX644889
VERSION     AX644889.1  GI:28610854
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Winkler,M.M. and Brown,D.
  TITLE     Competitive amplification of fractionated targets from multiple
            nucleic acid samples
  JOURNAL   Patent: WO 02061145-A 10 08-AUG-2002;
            AMBION, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .23
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"

  Query Match             0.7%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 63;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2249 GGAGGAGAAGGACATTTTACTGC 2271
              |||||||||||||||||||||||
Db         23 GGAGGAGAAGGACATTTTACTGC 1


RESULT 43
AR252260
LOCUS       AR252260                  27 bp    DNA     linear   PAT 20-DEC-2002
DEFINITION  Sequence 13 from patent US 6476214.
ACCESSION   AR252260
VERSION     AR252260.1  GI:27300141
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Eagles,P.A.M. and Zheng,R.Q.
  TITLE     Inhibition of cytokine production
  JOURNAL   Patent: US 6476214-A 13 05-NOV-2002;
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 22.4;  DB 1;  Length 27;
  Best Local Similarity   95.8%;  Pred. No. 79;
  Matches   23;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         31 CGACCCTGCCAAGGCTTGGCATTT 54
              |||||||||||||||||||||| ||
Db          1 CGACCCTGCCAAGGCTTGGCAGTT 24


RESULT 44
AX003065
LOCUS       AX003065                  27 bp    DNA     linear   PAT 24-AUG-2000
DEFINITION  Sequence 13 from Patent WO9937760.
ACCESSION   AX003065
VERSION     AX003065.1  GI:9926949
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Eagles,P.A. and Zheng,R.Q.
  TITLE     Inhibition of cytokine production
  JOURNAL   Patent: WO 9937760-A 13 29-JUL-1999;
            EAGLES PETER ANTHONY MINTER (GB); ZHENG RICHARD QIHAO (GB)
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Oligomer containing palindromic sequence from human
                     IL-5 promoter"

  Query Match             0.7%;  Score 22.4;  DB 1;  Length 27;
  Best Local Similarity   95.8%;  Pred. No. 79;
  Matches   23;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         31 CGACCCTGCCAAGGCTTGGCATTT 54
              |||||||||||||||||||||| ||
Db          1 CGACCCTGCCAAGGCTTGGCAGTT 24


RESULT 45
BD129707
LOCUS       BD129707                  27 bp    DNA     linear   PAT 18-SEP-2002
DEFINITION  Inhibition of cytokine production.
ACCESSION   BD129707
VERSION     BD129707.1  GI:23224652
KEYWORDS    JP 2002500883-A/13.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 27)
  AUTHORS   Eagles,P.A.M. and Zheng,R.Q.
  TITLE     Inhibition of cytokine production
  JOURNAL   Patent: JP 2002500883-A 13 15-JAN-2002;
            BTG INTERNATIONAL LTD
COMMENT     OS   Artificial Sequence
            PN   JP 2002500883-A/13
            PD   15-JAN-2002
            PF   20-JAN-1999 JP 2000528668
            PR   22-JAN-1998 GB    9801391.5,11-NOV-1998 GB    9824794.3 PI
            PETER ANTHONY MINTER EAGLES,RICHARD QIHAO ZHENG PC
            C12N15/09,A61K9/127,A61K31/711,A61K35/76,A61K48/00,A61P11/06, PC
            A61P19/02,
            PC   A61P29/00,A61P43/00//A61K38/00,C12N15/00,A61K37/02 CC
            Description of Artificial Sequence: Oligomer containing  CC
               palindromic
            CC   sequence from human IL-5 promoter
            FH   Key             Location/Qualifiers
            FT   source          1. .27
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .27
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.7%;  Score 22.4;  DB 1;  Length 27;
  Best Local Similarity   95.8%;  Pred. No. 79;
  Matches   23;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy         31 CGACCCTGCCAAGGCTTGGCATTT 54
              |||||||||||||||||||||| ||
Db          1 CGACCCTGCCAAGGCTTGGCAGTT 24


RESULT 46
AR080303
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LOCUS       AR080303                22 bp    DNA     linear   PAT 31-AUG-2000
DEFINITION  Sequence 9 from patent US 5968755.
ACCESSION   AR080303
VERSION     AR080303.1  GI:10007038
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Roederer,M., Rabin,R., Herzenberg,L.A. and Herzenberg,L.A.
  TITLE     Methods for determining T-cell profiles of immunocompromised
            subjects
  JOURNAL   Patent: US 5968755-A 9 19-OCT-1999;
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 70;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        579 GCTAGCTCTTGGAGCTGCCTAC 600
              ||||||||||||||||||||||
Db          1 GCTAGCTCTTGGAGCTGCCTAC 22


RESULT 47
E09217
LOCUS       E09217                  22 bp    DNA     linear   PAT 29-SEP-1997
DEFINITION  Primer for detecting and measuring cytokine-specific mRNA.
ACCESSION   E09217
VERSION     E09217.1  GI:22025843
KEYWORDS    JP 1995123984-A/16.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Hosokawa,T. and Akitaya,T.
  TITLE     PRIMER FOR DETECTING AND MEASURING SPECIFIC MESSENGER RNA
  JOURNAL   Patent: JP 1995123984-A 16 16-MAY-1995;
            HITACHI CHEM CO LTD
COMMENT     OS   None
            OC   Artificial sequences.
            PN   JP 1995123984-A/16
            PD   16-MAY-1995
            PF   05-NOV-1993 JP 1993275852
            PI   HOSOKAWA TOSHIAKI, AKITAYA TATSUO
            PC   C12N15/09,C12Q1/68;
            CC   strandedness: Single;
            CC   topology: Linear;
            FH   Key             Location/Qualifiers
            FH
            FT   source          1. .22
            FT                   /organism='Artificial sequences' FT
                   /note='complementary to No.619-No.640 of  FT
              HUMIL5'.
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 70;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        619 GAAATTCCCACAAGTGCATTGG 640
              ||||||||||||||||||||||
Db          1 GAAATTCCCACAAGTGCATTGG 22


RESULT 48
E09218/c
LOCUS       E09218                  22 bp    DNA     linear   PAT 29-SEP-1997
DEFINITION  Primer for detecting and measuring cytokine-specific mRNA.
ACCESSION   E09218
VERSION     E09218.1  GI:22025844
KEYWORDS    JP 1995123984-A/17.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Hosokawa,T. and Akitaya,T.
  TITLE     PRIMER FOR DETECTING AND MEASURING SPECIFIC MESSENGER RNA
  JOURNAL   Patent: JP 1995123984-A 17 16-MAY-1995;
            HITACHI CHEM CO LTD
COMMENT     OS   None
            OC   Artificial sequences.
            PN   JP 1995123984-A/17
            PD   16-MAY-1995
            PF   05-NOV-1993 JP 1993275852
            PI   HOSOKAWA TOSHIAKI, AKITAYA TATSUO
            PC   C12N15/09,C12Q1/68;
            CC   strandedness: Single;
            CC   topology: Linear;
            FH   Key             Location/Qualifiers
            FH
            FT   source          1. .22
            FT                   /organism='Artificial sequences' FT
                   /note='complementary to No.2139-No.2160 of  FT
              HUMIL5'.
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 70;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2139 CGGAGAGTAAACCAATTCCTAG 2160
              ||||||||||||||||||||||
Db         22 CGGAGAGTAAACCAATTCCTAG 1


RESULT 49
I39767
LOCUS       I39767                  22 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 40 from patent US 5616490.
ACCESSION   I39767
VERSION     I39767.1  GI:2084247
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 40 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 70;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        541 CGTTTCAGAGCCATGAGGATGC 562
              ||||||||||||||||||||||
Db          1 CGTTTCAGAGCCATGAGGATGC 22


RESULT 50
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I39771
LOCUS       I39771                    22 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 44 from patent US 5616490.
ACCESSION   I39771
VERSION     I39771.1  GI:2084251
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 44 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 70;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        666 TACTCATCGAACTCTGCTGATA 687
              ||||||||||||||||||||||
Db          1 TACTCATCGAACTCTGCTGATA 22


RESULT 51
A56953
LOCUS       A56953                    21 bp    DNA     linear   PAT 03-MAR-1998
DEFINITION  Sequence 11 from Patent WO9629091.
ACCESSION   A56953
VERSION     A56953.1  GI:3712936
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1
  AUTHORS   Stanley,M.A. and Scarpini,C.G.
  TITLE     TREATMENT OF PAPILLOMAVIRUS-ASSOCIATED LESIONS USING INTERLEUKIN-12
  JOURNAL   Patent: WO 9629091-A 11 26-SEP-1996;
            UNIV CAMBRIDGE TECH (GB)
COMMENT     Other publication AU 5151596 961008.
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        553 ATGAGGATGCTTCTGCATTTG 573
              |||||||||||||||||||||
Db          1 ATGAGGATGCTTCTGCATTTG 21


RESULT 52
A86924/c
LOCUS       A86924                    21 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 15 from Patent WO9838306.
ACCESSION   A86924
VERSION     A86924.1  GI:6735708
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Dolganov,G.
  TITLE     TRANSCRIPTS ENCODING IMMUNOMODULATORY POLYPEPTIDES
  JOURNAL   Patent: WO 9838306-A 15 03-SEP-1998;
            GENELABS TECH INC (US)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /isolate="PRIMER IL4-2"
                     /db_xref="taxon:32644"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
              |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 53
AR048336/c
LOCUS       AR048336                  21 bp    DNA     linear   PAT 29-SEP-1999
DEFINITION  Sequence 15 from patent US 5821091.
ACCESSION   AR048336
VERSION     AR048336.1  GI:5970679
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Dolganov,G.
  TITLE     Method of identifying activated T-cells
  JOURNAL   Patent: US 5821091-A 15 13-OCT-1998;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
              |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 54
AR079227/c
LOCUS       AR079227                  21 bp    DNA     linear   PAT 31-AUG-2000
DEFINITION  Sequence 15 from patent US 5965427.
ACCESSION   AR079227
VERSION     AR079227.1  GI:10005973
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Dolganov,G. and Novikov,A.
  TITLE     Human RAD50 gene and methods of use thereof
  JOURNAL   Patent: US 5965427-A 15 12-OCT-1999;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
              |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 55
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AR309658/c
LOCUS       AR309658                 21 bp    DNA     linear   PAT 12-JUN-2003
DEFINITION  Sequence 15 from patent US 6555666.
ACCESSION   AR309658
VERSION     AR309658.1  GI:31701735
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 21)
  AUTHORS   Dolganov,G.
  TITLE     Transcripts encoding immunomodulatory polypeptides
  JOURNAL   Patent: US 6555666-A 15 29-APR-2003;
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
              |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 56
AX643971
LOCUS       AX643971                 21 bp    DNA     linear   PAT 24-FEB-2003
DEFINITION  Sequence 9 from Patent WO02061140.
ACCESSION   AX643971
VERSION     AX643971.1  GI:28551855
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Brown,D. and Winkler,M.M.
  TITLE     Competitive population normalization for comparative analysis of
            nucleic acid samples
  JOURNAL   Patent: WO 02061140-A 9 08-AUG-2002;
            AMBION, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 57
AX643984
LOCUS       AX643984                 21 bp    DNA     linear   PAT 24-FEB-2003
DEFINITION  Sequence 22 from Patent WO02061140.
ACCESSION   AX643984
VERSION     AX643984.1  GI:28551874
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Brown,D. and Winkler,M.M.
  TITLE     Competitive population normalization for comparative analysis of
            nucleic acid samples
  JOURNAL   Patent: WO 02061140-A 22 08-AUG-2002;
            AMBION, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 58
AX644888
LOCUS       AX644888                 21 bp    DNA     linear   PAT 27-FEB-2003
DEFINITION  Sequence 9 from Patent WO02061145.
ACCESSION   AX644888
VERSION     AX644888.1  GI:28610853
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Winkler,M.M. and Brown,D.
  TITLE     Competitive amplification of fractionated targets from multiple
            nucleic acid samples
  JOURNAL   Patent: WO 02061145-A 9 08-AUG-2002;
            AMBION, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 59
AX644902
LOCUS       AX644902                 21 bp    DNA     linear   PAT 27-FEB-2003
DEFINITION  Sequence 23 from Patent WO02061145.
ACCESSION   AX644902
VERSION     AX644902.1  GI:28610867
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Winkler,M.M. and Brown,D.
  TITLE     Competitive amplification of fractionated targets from multiple
            nucleic acid samples
  JOURNAL   Patent: WO 02061145-A 23 08-AUG-2002;
            AMBION, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Synthetic Primer"
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  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 60
AX801572/c
LOCUS       AX801572                  21 bp    DNA     linear   PAT 24-NOV-2003
DEFINITION  Sequence 8 from Patent EP1329506.
ACCESSION   AX801572
VERSION     AX801572.1  GI:38500544
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Stordeur,P. and Goldman,M.
  TITLE     Method to quantify in vivo rna levels
  JOURNAL   Patent: EP 1329506-A 8 23-JUL-2003;
            Cypro S.A. (BE)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        641 TGAAAGAGACCTTGGCACTGC 661
              |||||||||||||||||||||
Db         21 TGAAAGAGACCTTGGCACTGC 1


RESULT 61
AX805804/c
LOCUS       AX805804                  21 bp    DNA     linear   PAT 25-NOV-2003
DEFINITION  Sequence 8 from Patent WO03060119.
ACCESSION   AX805804
VERSION     AX805804.1  GI:38522715
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Stordeur,P. and Goldman,M.
  TITLE     Method to determine in vivo nucleic acid levels
  JOURNAL   Patent: WO 03060119-A 8 24-JUL-2003;
            Universite Libre de Bruxelles (BE)
FEATURES             Location/Qualifiers
     source          1. .21
                     /organism="synthetic construct"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32630"
                     /note="Oligonucleotide"

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 78;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        641 TGAAAGAGACCTTGGCACTGC 661
              |||||||||||||||||||||
Db         21 TGAAAGAGACCTTGGCACTGC 1


RESULT 62
AR136236/c
LOCUS       AR136236                  20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 39 from patent US 6136603.
ACCESSION   AR136236
VERSION     AR136236.1  GI:14476908
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 39 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 63
AR136237/c
LOCUS       AR136237                  20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 40 from patent US 6136603.
ACCESSION   AR136237
VERSION     AR136237.1  GI:14476909
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 40 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 64
AR136238/c
LOCUS       AR136238                  20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 41 from patent US 6136603.
ACCESSION   AR136238
VERSION     AR136238.1  GI:14476910
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 41 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"
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  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        540 ACGTTTCAGAGCCATGAGGA 559
              ||||||||||||||||||||
Db         20 ACGTTTCAGAGCCATGAGGA 1


RESULT 65
AR136239/c
LOCUS       AR136239                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 42 from patent US 6136603.
ACCESSION   AR136239
VERSION     AR136239.1  GI:14476911
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 42 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 66
AR136240/c
LOCUS       AR136240                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 43 from patent US 6136603.
ACCESSION   AR136240
VERSION     AR136240.1  GI:14476912
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 43 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        857 TGAATGCTGGTGTGCTGTAA 876
              ||||||||||||||||||||
Db         20 TGAATGCTGGTGTGCTGTAA 1


RESULT 67
AR136241/c
LOCUS       AR136241                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 44 from patent US 6136603.
ACCESSION   AR136241
VERSION     AR136241.1  GI:14476913
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 44 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 68
AR136242/c
LOCUS       AR136242                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 45 from patent US 6136603.
ACCESSION   AR136242
VERSION     AR136242.1  GI:14476914
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 45 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        905 ACTCTGAGGATTCCTGTTCC 924
              ||||||||||||||||||||
Db         20 ACTCTGAGGATTCCTGTTCC 1


RESULT 69
AR136243/c
LOCUS       AR136243                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 46 from patent US 6136603.
ACCESSION   AR136243
VERSION     AR136243.1  GI:14476915
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 46 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
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Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 70
AR136244/c
LOCUS       AR136244                  20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 47 from patent US 6136603.
ACCESSION   AR136244
VERSION     AR136244.1  GI:14476916
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 47 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        964 TGATGGCATGAATAAGTAAA 983
              ||||||||||||||||||||
Db         20 TGATGGCATGAATAAGTAAA 1


RESULT 71
AR136245/c
LOCUS       AR136245                  20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 48 from patent US 6136603.
ACCESSION   AR136245
VERSION     AR136245.1  GI:14476917
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 48 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1161 TTCCCAAAGAGCATCGTGTC 1180
              ||||||||||||||||||||
Db         20 TTCCCAAAGAGCATCGTGTC 1


RESULT 72
AR136246/c
LOCUS       AR136246                  20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 49 from patent US 6136603.
ACCESSION   AR136246
VERSION     AR136246.1  GI:14476918
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 49 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1407 TGCCTGGTCATATTAAAATG 1426
              ||||||||||||||||||||
Db         20 TGCCTGGTCATATTAAAATG 1


RESULT 73
AR136247/c
LOCUS       AR136247                  20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 50 from patent US 6136603.
ACCESSION   AR136247
VERSION     AR136247.1  GI:14476919
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 50 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1627 TGGTGGTTTGTTGCCTAGAA 1646
              ||||||||||||||||||||
Db         20 TGGTGGTTTGTTGCCTAGAA 1


RESULT 74
AR136248/c
LOCUS       AR136248                  20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 51 from patent US 6136603.
ACCESSION   AR136248
VERSION     AR136248.1  GI:14476920
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 51 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 75
AR136249/c
LOCUS       AR136249                  20 bp    DNA     linear   PAT 16-JUN-2001
```

```
DEFINITION  Sequence 52 from patent US 6136603.
ACCESSION   AR136249
VERSION     AR136249.1  GI:14476921
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 52 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1884 ACCAACTGTGCACTGAAGAA 1903
             ||||||||||||||||||||
Db         20 ACCAACTGTGCACTGAAGAA 1


RESULT 76
AR136250/c
LOCUS       AR136250                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 53 from patent US 6136603.
ACCESSION   AR136250
VERSION     AR136250.1  GI:14476922
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 53 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1932 GTCAAACTGTGCAAGGGGGT 1951
             ||||||||||||||||||||
Db         20 GTCAAACTGTGCAAGGGGGT 1


RESULT 77
AR136251/c
LOCUS       AR136251                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 54 from patent US 6136603.
ACCESSION   AR136251
VERSION     AR136251.1  GI:14476923
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 54 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1988 AAGAAATACATTGACGGCCA 2007
             ||||||||||||||||||||
Db         20 AAGAAATACATTGACGGCCA 1


RESULT 78
AR136252/c
LOCUS       AR136252                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 55 from patent US 6136603.
ACCESSION   AR136252
VERSION     AR136252.1  GI:14476924
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 55 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
             ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 79
AR136253/c
LOCUS       AR136253                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 56 from patent US 6136603.
ACCESSION   AR136253
VERSION     AR136253.1  GI:14476925
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 56 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2051 GCTGTGCCTATTTCTATGGA 2070
             ||||||||||||||||||||
Db         20 GCTGTGCCTATTTCTATGGA 1


RESULT 80
AR136254/c
LOCUS       AR136254                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 57 from patent US 6136603.
ACCESSION   AR136254
VERSION     AR136254.1  GI:14476926
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
```

```
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 57 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 81
AR136255/c
LOCUS       AR136255                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 58 from patent US 6136603.
ACCESSION   AR136255
VERSION     AR136255.1  GI:14476927
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 58 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2135 AAGACGGAGAGTAAACCAAT 2154
              ||||||||||||||||||||
Db         20 AAGACGGAGAGTAAACCAAT 1


RESULT 82
AR136256/c
LOCUS       AR136256                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 59 from patent US 6136603.
ACCESSION   AR136256
VERSION     AR136256.1  GI:14476928
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 59 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2186 AATGAACACCGAGTGGATAA 2205
              ||||||||||||||||||||
Db         20 AATGAACACCGAGTGGATAA 1


RESULT 83
AR136257/c
LOCUS       AR136257                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 60 from patent US 6136603.
ACCESSION   AR136257
VERSION     AR136257.1  GI:14476929
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 60 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2241 AAGATTTTGGAGGAGAAGGA 2260
              ||||||||||||||||||||
Db         20 AAGATTTTGGAGGAGAAGGA 1


RESULT 84
AR136258/c
LOCUS       AR136258                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 61 from patent US 6136603.
ACCESSION   AR136258
VERSION     AR136258.1  GI:14476930
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 61 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
              ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 85
AR136259/c
LOCUS       AR136259                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 62 from patent US 6136603.
ACCESSION   AR136259
VERSION     AR136259.1  GI:14476931
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 62 24-OCT-2000;
FEATURES             Location/Qualifiers
```

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     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
             ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 86
AR136260/c
LOCUS       AR136260                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 63 from patent US 6136603.
ACCESSION   AR136260
VERSION     AR136260.1  GI:14476932
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 63 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
             ||||||||||||||||||||
Db         20 AAGTATTTTCCTCCAGGCAA 1


RESULT 87
AR136261/c
LOCUS       AR136261                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 64 from patent US 6136603.
ACCESSION   AR136261
VERSION     AR136261.1  GI:14476933
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 64 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 88
AR136262/c
LOCUS       AR136262                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 65 from patent US 6136603.
ACCESSION   AR136262
VERSION     AR136262.1  GI:14476934
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 65 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 89
AR136263/c
LOCUS       AR136263                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 66 from patent US 6136603.
ACCESSION   AR136263
VERSION     AR136263.1  GI:14476935
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 66 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 90
AR136264/c
LOCUS       AR136264                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 67 from patent US 6136603.
ACCESSION   AR136264
VERSION     AR136264.1  GI:14476936
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 67 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
```

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  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 91
AR136265/c
LOCUS       AR136265                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 68 from patent US 6136603.
ACCESSION   AR136265
VERSION     AR136265.1  GI:14476937
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 68 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 92
AR136266/c
LOCUS       AR136266                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 69 from patent US 6136603.
ACCESSION   AR136266
VERSION     AR136266.1  GI:14476938
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 69 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 93
AR136267/c
LOCUS       AR136267                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 70 from patent US 6136603.
ACCESSION   AR136267
VERSION     AR136267.1  GI:14476939
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 70 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
              ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 94
AR136268/c
LOCUS       AR136268                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 71 from patent US 6136603.
ACCESSION   AR136268
VERSION     AR136268.1  GI:14476940
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 71 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 95
BD247691/c
LOCUS       BD247691                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247691
VERSION     BD247691.1  GI:33057461
KEYWORDS    JP 2002539846-A/39.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 39 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/39
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
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            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 96
BD247692/c
LOCUS       BD247692                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247692
VERSION     BD247692.1  GI:33057462
KEYWORDS    JP 2002539846-A/40.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 40 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/40
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
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FEATURES             Location/Qualifiers
     source          1. .20
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                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 97
BD247693/c
LOCUS       BD247693                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247693
VERSION     BD247693.1  GI:33057463
KEYWORDS    JP 2002539846-A/41.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 41 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/41
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        540 ACGTTTCAGAGCCATGAGGA 559
              ||||||||||||||||||||
Db         20 ACGTTTCAGAGCCATGAGGA 1


RESULT 98
BD247694/c
LOCUS       BD247694                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247694
VERSION     BD247694.1  GI:33057464
KEYWORDS    JP 2002539846-A/42.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 42 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/42
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
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                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 99
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BD247695/c
LOCUS       BD247695                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247695
VERSION     BD247695.1  GI:33057465
KEYWORDS    JP 2002539846-A/43.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 43 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/43
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        857 TGAATGCTGGTGTGCTGTAA 876
              ||||||||||||||||||||
Db         20 TGAATGCTGGTGTGCTGTAA 1


RESULT 100
BD247696/c
LOCUS       BD247696                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247696
VERSION     BD247696.1  GI:33057466
KEYWORDS    JP 2002539846-A/44.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 44 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/44
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 101
BD247697/c
LOCUS       BD247697                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247697
VERSION     BD247697.1  GI:33057467
KEYWORDS    JP 2002539846-A/45.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 45 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/45
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
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            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
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                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        905 ACTCTGAGGATTCCTGTTCC 924
              ||||||||||||||||||||
Db         20 ACTCTGAGGATTCCTGTTCC 1


RESULT 102
BD247698/c
LOCUS       BD247698                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247698
VERSION     BD247698.1  GI:33057468
KEYWORDS    JP 2002539846-A/46.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 46 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/46
            PD   26-NOV-2002
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            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 103
BD247699/c
LOCUS       BD247699                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247699
VERSION     BD247699.1  GI:33057469
KEYWORDS    JP 2002539846-A/47.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 47 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/47
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        964 TGATGGCATGAATAAGTAAA 983
              ||||||||||||||||||||
Db         20 TGATGGCATGAATAAGTAAA 1


RESULT 104
BD247700/c
LOCUS       BD247700                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247700
VERSION     BD247700.1  GI:33057470
KEYWORDS    JP 2002539846-A/48.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 48 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/48
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1161 TTCCCAAAGAGCATCGTGTC 1180
              ||||||||||||||||||||
Db         20 TTCCCAAAGAGCATCGTGTC 1


RESULT 105
BD247701/c
LOCUS       BD247701                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247701
VERSION     BD247701.1  GI:33057471
KEYWORDS    JP 2002539846-A/49.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 49 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/49
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
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  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1407 TGCCTGGTCATATTAAAATG 1426
              ||||||||||||||||||||
Db         20 TGCCTGGTCATATTAAAATG 1


RESULT 106
BD247702/c
LOCUS       BD247702                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247702
VERSION     BD247702.1  GI:33057472
KEYWORDS    JP 2002539846-A/50.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 50 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/50
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1627 TGGTGGTTTGTTGCCTAGAA 1646
              ||||||||||||||||||||
Db         20 TGGTGGTTTGTTGCCTAGAA 1


RESULT 107
BD247703/c
LOCUS       BD247703                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247703
VERSION     BD247703.1  GI:33057473
KEYWORDS    JP 2002539846-A/51.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 51 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/51
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 108
BD247704/c
LOCUS       BD247704                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247704
VERSION     BD247704.1  GI:33057474
KEYWORDS    JP 2002539846-A/52.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 52 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/52
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1884 ACCAACTGTGCACTGAAGAA 1903
              ||||||||||||||||||||
Db         20 ACCAACTGTGCACTGAAGAA 1


RESULT 109
BD247705/c
LOCUS       BD247705                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247705
VERSION     BD247705.1  GI:33057475
KEYWORDS    JP 2002539846-A/53.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
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            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 53 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/53
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
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FEATURES              Location/Qualifiers
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                      /organism="synthetic construct"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1932 GTCAAACTGTGCAAGGGGGT 1951
             ||||||||||||||||||||
Db         20 GTCAAACTGTGCAAGGGGGT 1


RESULT 110
BD247706/c
LOCUS       BD247706                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247706
VERSION     BD247706.1  GI:33057476
KEYWORDS    JP 2002539846-A/54.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 54 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/54
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .20
                      /organism="synthetic construct"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1988 AAGAAATACATTGACGGCCA 2007
             ||||||||||||||||||||
Db         20 AAGAAATACATTGACGGCCA 1


RESULT 111
BD247707/c
LOCUS       BD247707                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247707
VERSION     BD247707.1  GI:33057477
KEYWORDS    JP 2002539846-A/55.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 55 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/55
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .20
                      /organism="synthetic construct"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
             ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 112
BD247708/c
LOCUS       BD247708                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247708
VERSION     BD247708.1  GI:33057478
KEYWORDS    JP 2002539846-A/56.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 56 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/56
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
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            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .20
                      /organism="synthetic construct"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match              0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2051 GCTGTGCCTATTTCTATGGA 2070
              ||||||||||||||||||||
Db         20 GCTGTGCCTATTTCTATGGA 1


RESULT 113
BD247709/c
LOCUS       BD247709                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247709
VERSION     BD247709.1  GI:33057479
KEYWORDS    JP 2002539846-A/57.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 57 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/57
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .20
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                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match              0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 114
BD247710/c
LOCUS       BD247710                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247710
VERSION     BD247710.1  GI:33057480
KEYWORDS    JP 2002539846-A/58.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 58 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/58
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .20
                      /organism="synthetic construct"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match              0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2135 AAGACGGAGAGTAAACCAAT 2154
              ||||||||||||||||||||
Db         20 AAGACGGAGAGTAAACCAAT 1


RESULT 115
BD247711/c
LOCUS       BD247711                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247711
VERSION     BD247711.1  GI:33057481
KEYWORDS    JP 2002539846-A/59.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 59 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/59
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES              Location/Qualifiers
     source           1. .20
                      /organism="synthetic construct"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32630"

  Query Match              0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2186 AATGAACACCGAGTGGATAA 2205
              ||||||||||||||||||||
Db         20 AATGAACACCGAGTGGATAA 1
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RESULT 116
BD247712/c
LOCUS       BD247712                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247712
VERSION     BD247712.1  GI:33057482
KEYWORDS    JP 2002539846-A/60.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 60 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/60
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2241 AAGATTTTGGAGGAGAAGGA 2260
             ||||||||||||||||||||
Db         20 AAGATTTTGGAGGAGAAGGA 1


RESULT 117
BD247713/c
LOCUS       BD247713                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247713
VERSION     BD247713.1  GI:33057483
KEYWORDS    JP 2002539846-A/61.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 61 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/61
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
             ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 118
BD247714/c
LOCUS       BD247714                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247714
VERSION     BD247714.1  GI:33057484
KEYWORDS    JP 2002539846-A/62.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 62 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/62
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
             ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 119
BD247715/c
LOCUS       BD247715                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247715
VERSION     BD247715.1  GI:33057485
KEYWORDS    JP 2002539846-A/63.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 63 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/63
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            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
             ||||||||||||||||||||
Db         20 AAGTATTTTCCTCCAGGCAA 1


RESULT 120
BD247716/c
LOCUS       BD247716                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247716
VERSION     BD247716.1  GI:33057486
KEYWORDS    JP 2002539846-A/64.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 64 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/64
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 121
BD247717/c
LOCUS       BD247717                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247717
VERSION     BD247717.1  GI:33057487
KEYWORDS    JP 2002539846-A/65.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 65 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/65
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
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                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 122
BD247718/c
LOCUS       BD247718                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247718
VERSION     BD247718.1  GI:33057488
KEYWORDS    JP 2002539846-A/66.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 66 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/66
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"
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  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 123
BD247719/c
LOCUS       BD247719                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247719
VERSION     BD247719.1  GI:33057489
KEYWORDS    JP 2002539846-A/67.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 67 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/67
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 124
BD247720/c
LOCUS       BD247720                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247720
VERSION     BD247720.1  GI:33057490
KEYWORDS    JP 2002539846-A/68.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 68 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/68
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 125
BD247721/c
LOCUS       BD247721                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247721
VERSION     BD247721.1  GI:33057491
KEYWORDS    JP 2002539846-A/69.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 69 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/69
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="synthetic construct"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 126
BD247722/c
LOCUS       BD247722                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247722
VERSION     BD247722.1  GI:33057492
KEYWORDS    JP 2002539846-A/70.
SOURCE      synthetic construct
```

```
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 70 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/70
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES            Location/Qualifiers
     source         1. .20
                    /organism="synthetic construct"
                    /mol_type="genomic DNA"
                    /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
             ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 127
BD247723/c
LOCUS       BD247723                  20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247723
VERSION     BD247723.1  GI:33057493
KEYWORDS    JP 2002539846-A/71.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 71 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/71
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES            Location/Qualifiers
     source         1. .20
                    /organism="synthetic construct"
                    /mol_type="genomic DNA"
                    /db_xref="taxon:32630"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
             ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 128
AX801571
LOCUS       AX801571                  20 bp    DNA     linear   PAT 24-NOV-2003
DEFINITION  Sequence 7 from Patent EP1329506.
ACCESSION   AX801571
VERSION     AX801571.1  GI:38500543
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Stordeur,P. and Goldman,M.
  TITLE     Method to quantify in vivo rna levels
  JOURNAL   Patent: EP 1329506-A 7 23-JUL-2003;
            Cypro S.A. (BE)
FEATURES            Location/Qualifiers
     source         1. .20
                    /organism="synthetic construct"
                    /mol_type="unassigned DNA"
                    /db_xref="taxon:32630"
                    /note="Oligonucleotide"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        591 AGCTGCCTACGTGTATGCCA 610
              ||||||||||||||||||||
Db          1 AGCTGCCTACGTGTATGCCA 20


RESULT 129
AX805803
LOCUS       AX805803                  20 bp    DNA     linear   PAT 25-NOV-2003
DEFINITION  Sequence 7 from Patent WO03060119.
ACCESSION   AX805803
VERSION     AX805803.1  GI:38522714
KEYWORDS    .
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1
  AUTHORS   Stordeur,P. and Goldman,M.
  TITLE     Method to determine in vivo nucleic acid levels
  JOURNAL   Patent: WO 03060119-A 7 24-JUL-2003;
            Universite Libre de Bruxelles (BE)
FEATURES            Location/Qualifiers
     source         1. .20
                    /organism="synthetic construct"
                    /mol_type="unassigned DNA"
                    /db_xref="taxon:32630"
                    /note="Oligonucleotide"

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 86;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        591 AGCTGCCTACGTGTATGCCA 610
              ||||||||||||||||||||
Db          1 AGCTGCCTACGTGTATGCCA 20


RESULT 130
AR300438/c
LOCUS       AR300438                  22 bp    DNA     linear   PAT 12-JUN-2003
DEFINITION  Sequence 4 from patent US 6537781.
ACCESSION   AR300438
VERSION     AR300438.1  GI:31687877
```

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KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.P.
  TITLE     Methods and compositions concerning canine interleukin 5
  JOURNAL   Patent: US 6537781-A 4 25-MAR-2003;
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="unknown"
                     /mol_type="genomic DNA"

  Query Match             0.6%;  Score 18.8;  DB 1;  Length 22;
  Best Local Similarity   90.9%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2196 GAGTGGATAATAGAAAGTTGAG 2217
              ||||||| ||| ||||||||||
Db         22 GAGTGGACAATGGAAAGTTGAG 1


RESULT 131
AX083942/c
LOCUS       AX083942                 22 bp    DNA     linear   PAT 22-JUN-2001
DEFINITION  Sequence 4 from Patent WO0111049.
ACCESSION   AX083942
VERSION     AX083942.1  GI:13185504
KEYWORDS    .
SOURCE      Canis familiaris (dog)
  ORGANISM  Canis familiaris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
REFERENCE   1
  AUTHORS   Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.P.
  TITLE     Methods and compositions concerning canine interleukin 5
  JOURNAL   Patent: WO 0111049-A 4 15-FEB-2001;
            IDEXX LABORATORIES, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="Canis familiaris"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9615"
                     /note="PCR primer"

  Query Match             0.6%;  Score 18.8;  DB 1;  Length 22;
  Best Local Similarity   90.9%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       2196 GAGTGGATAATAGAAAGTTGAG 2217
              ||||||| ||| ||||||||||
Db         22 GAGTGGACAATGGAAAGTTGAG 1


RESULT 132
AR136212/c
LOCUS       AR136212                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 15 from patent US 6136603.
ACCESSION   AR136212
VERSION     AR136212.1  GI:14476884
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 15 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1986 TAAAGAAATACATTGACGGC 2005
              |||||||||||||||||| ||
Db         20 TAAAGAAATACATTGACCGC 1


RESULT 133
AR136269/c
LOCUS       AR136269                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 72 from patent US 6136603.
ACCESSION   AR136269
VERSION     AR136269.1  GI:14476941
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 72 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
              |||||||||| |||||||||
Db         20 CATACTGACAGTTTGCCAGA 1


RESULT 134
AR136272/c
LOCUS       AR136272                 20 bp    DNA     linear   PAT 16-JUN-2001
DEFINITION  Sequence 75 from patent US 6136603.
ACCESSION   AR136272
VERSION     AR136272.1  GI:14476944
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and McKay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: US 6136603-A 75 24-OCT-2000;
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
              ||||||||| |||||||||
Db         20 AAGTATTTTCGTCCAGGCAA 1


RESULT 135
BD247667/c
LOCUS       BD247667                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247667
VERSION     BD247667.1  GI:33057437
KEYWORDS    JP 2002539846-A/15.
SOURCE      synthetic construct
```

```
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 15 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/15
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES            Location/Qualifiers
     source         1. .20
                    /organism="synthetic construct"
                    /mol_type="genomic DNA"
                    /db_xref="taxon:32630"

  Query Match           0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1986 TAAAGAAATACATTGACGGC 2005
              ||||||||||||||||| ||
Db         20 TAAAGAAATACATTGACCGC 1


RESULT 136
BD247724/c
LOCUS       BD247724                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247724
VERSION     BD247724.1  GI:33057494
KEYWORDS    JP 2002539846-A/72.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 72 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/72
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES            Location/Qualifiers
     source         1. .20
                    /organism="synthetic construct"
                    /mol_type="genomic DNA"
                    /db_xref="taxon:32630"

  Query Match           0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
              |||||||||| |||||||||
Db         20 CATACTGACAGTTTGCCAGA 1


RESULT 137
BD247727/c
LOCUS       BD247727                 20 bp    DNA     linear   PAT 17-JUL-2003
DEFINITION  Antisense modulation of interleukin-5 signal transduction.
ACCESSION   BD247727
VERSION     BD247727.1  GI:33057497
KEYWORDS    JP 2002539846-A/75.
SOURCE      synthetic construct
  ORGANISM  synthetic construct
            artificial sequences.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Dean,N.M., Karras,J.G. and Mckay,R.
  TITLE     Antisense modulation of interleukin-5 signal transduction
  JOURNAL   Patent: JP 2002539846-A 75 26-NOV-2002;
            ISIS PHARMACEUTICALS INC
COMMENT     OS   Artificial Sequence
            PN   JP 2002539846-A/75
            PD   26-NOV-2002
            PF   17-MAR-2000 JP 2000608790
            PR   26-MAR-1999 US    09/280799
            PI   NICHOLAS M DEAN,JAMES G KARRAS,ROBERT MCKAY
            PC   C12N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
            PC   A61P43/00,
            PC   A61P43/00,C12N5/02,C12N15/00
            CC   Description of Artificial Sequence:Synthetic
            FH   Key             Location/Qualifiers
            FT   source          1. .20
            FT                   /organism='Artificial Sequence'.
FEATURES            Location/Qualifiers
     source         1. .20
                    /organism="synthetic construct"
                    /mol_type="genomic DNA"
                    /db_xref="taxon:32630"

  Query Match           0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
              |||||||||| |||||||||
Db         20 AAGTATTTTCGTCCAGGCAA 1


RESULT 138
AR300437
LOCUS       AR300437                 20 bp    DNA     linear   PAT 12-JUN-2003
DEFINITION  Sequence 3 from patent US 6537781.
ACCESSION   AR300437
VERSION     AR300437.1  GI:31687876
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 20)
  AUTHORS   Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.P.
  TITLE     Methods and compositions concerning canine interleukin 5
  JOURNAL   Patent: US 6537781-A 3 25-MAR-2003;
FEATURES            Location/Qualifiers
     source         1. .20
                    /organism="unknown"
                    /mol_type="genomic DNA"

  Query Match           0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        635 CATTGGTGAAAGAGACCTTG 654
              || ||||||||||||||||||
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Db          1 CAGTGGTGAAAGAGACCTTG 20


RESULT 139
AX083941
LOCUS       AX083941                  20 bp    DNA     linear   PAT 22-JUN-2001
DEFINITION  Sequence 3 from Patent WO0111049.
ACCESSION   AX083941
VERSION     AX083941.1  GI:13185503
KEYWORDS    .
SOURCE      Canis familiaris (dog)
  ORGANISM  Canis familiaris
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
REFERENCE   1
  AUTHORS   Guo,H., Lawton,R., Mermer,B. and Aiyappa,A.P.
  TITLE     Methods and compositions concerning canine interleukin 5
  JOURNAL   Patent: WO 0111049-A 3 15-FEB-2001;
            IDEXX LABORATORIES, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .20
                     /organism="Canis familiaris"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:9615"
                     /note="PCR primer"

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 20;
  Best Local Similarity   95.0%;  Pred. No. 1.1e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        635 CATTGGTGAAAGAGACCTTG 654
              || ||||||||||||||||||
Db          1 CAGTGGTGAAAGAGACCTTG 20


RESULT 140
I05460
LOCUS       I05460                    22 bp    DNA     linear   PAT 02-DEC-1994
DEFINITION  Sequence 12 from Patent EP 0267779.
ACCESSION   I05460
VERSION     I05460.1  GI:590966
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 22)
  AUTHORS   Coffman,R., Yokota,T., Crute,J.J., Lee,F. and Arai,K.-i.
  TITLE     Human pleiotropic immune factor and muteins thereof
  JOURNAL   Patent: EP 0267779-A2 12 18-MAY-1988;
FEATURES             Location/Qualifiers
     source          1. .22
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18.4;  DB 1;  Length 22;
  Best Local Similarity   95.0%;  Pred. No. 1.2e+02;
  Matches   19;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1904 ATCTTTCAGGGAATAGGCAC 1923
              |||||| ||||||||||||||
Db          2 ATCTTTGAGGGAATAGGCAC 21


RESULT 141
A89366/c
LOCUS       A89366                    18 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 1514 from Patent WO9833904.
ACCESSION   A89366
VERSION     A89366.1  GI:6737936
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Brysch,W. and Schlingensiepen,K.
  TITLE     AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
  JOURNAL   Patent: WO 9833904-A 1514 06-AUG-1998;
            BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2172 GAGTTTCTTGGTGTAATG 2189
              ||||||||||||||||||
Db         18 GAGTTTCTTGGTGTAATG 1


RESULT 142
A89367/c
LOCUS       A89367                    18 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 1515 from Patent WO9833904.
ACCESSION   A89367
VERSION     A89367.1  GI:6737937
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Brysch,W. and Schlingensiepen,K.
  TITLE     AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
  JOURNAL   Patent: WO 9833904-A 1515 06-AUG-1998;
            BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAG 2198
              ||||||||||||||||||
Db         18 GGTGTAATGAACACCGAG 1


RESULT 143
A89368/c
LOCUS       A89368                    18 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 1516 from Patent WO9833904.
ACCESSION   A89368
VERSION     A89368.1  GI:6737938
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Brysch,W. and Schlingensiepen,K.
  TITLE     AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
  JOURNAL   Patent: WO 9833904-A 1516 06-AUG-1998;
            BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
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  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2195 CGAGTGGATAATAGAAAG 2212
              ||||||||||||||||||
Db         18 CGAGTGGATAATAGAAAG 1


RESULT 144
A89369/c
LOCUS       A89369                   18 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 1517 from Patent WO9833904.
ACCESSION   A89369
VERSION     A89369.1  GI:6737939
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Brysch,W. and Schlingensiepen,K.
  TITLE     AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
  JOURNAL   Patent: WO 9833904-A 1517 06-AUG-1998;
            BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2210 AAGTTGAGACTAAACTGG 2227
              ||||||||||||||||||
Db         18 AAGTTGAGACTAAACTGG 1


RESULT 145
A89370/c
LOCUS       A89370                   18 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 1518 from Patent WO9833904.
ACCESSION   A89370
VERSION     A89370.1  GI:6737940
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Brysch,W. and Schlingensiepen,K.
  TITLE     AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
  JOURNAL   Patent: WO 9833904-A 1518 06-AUG-1998;
            BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2212 GTTGAGACTAAACTGGTT 2229
              ||||||||||||||||||
Db         18 GTTGAGACTAAACTGGTT 1


RESULT 146
A89371/c
LOCUS       A89371                   18 bp    DNA     linear   PAT 22-JAN-2000
DEFINITION  Sequence 1519 from Patent WO9833904.
ACCESSION   A89371
VERSION     A89371.1  GI:6737941
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Brysch,W. and Schlingensiepen,K.
  TITLE     AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
  JOURNAL   Patent: WO 9833904-A 1519 06-AUG-1998;
            BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned DNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2215 GAGACTAAACTGGTTTGT 2232
              ||||||||||||||||||
Db         18 GAGACTAAACTGGTTTGT 1


RESULT 147
I39665
LOCUS       I39665                   18 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 703 from patent US 5616488.
ACCESSION   I39665
VERSION     I39665.1  GI:2084145
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Sullivan,S., Draper,K.G., McSwiggen,J. and Stinchcomb,D.T.
  TITLE     IL-5 targeted ribozymes
  JOURNAL   Patent: US 5616488-A 703 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        588 TGGAGCTGCCTACGTGTA 605
              ||||||||||||||||||
Db          1 TGGAGCTGCCTACGTGTA 18


RESULT 148
I39667
LOCUS       I39667                   18 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 705 from patent US 5616488.
ACCESSION   I39667
VERSION     I39667.1  GI:2084147
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Sullivan,S., Draper,K.G., McSwiggen,J. and Stinchcomb,D.T.
  TITLE     IL-5 targeted ribozymes
  JOURNAL   Patent: US 5616488-A 705 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
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```
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        653 TGGCACTGCTTTCTACTC 670
              ||||||||||||||||||
Db          1 TGGCACTGCTTTCTACTC 18


RESULT 149
I39669
LOCUS       I39669                   18 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 707 from patent US 5616488.
ACCESSION   I39669
VERSION     I39669.1  GI:2084149
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Sullivan,S., Draper,K.G., McSwiggen,J. and Stinchcomb,D.T.
  TITLE     IL-5 targeted ribozymes
  JOURNAL   Patent: US 5616488-A 707 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 GAACTCTGCTGATAGCCA 691
              ||||||||||||||||||
Db          1 GAACTCTGCTGATAGCCA 18


RESULT 150
I39671
LOCUS       I39671                   18 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 709 from patent US 5616488.
ACCESSION   I39671
VERSION     I39671.1  GI:2084151
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Sullivan,S., Draper,K.G., McSwiggen,J. and Stinchcomb,D.T.
  TITLE     IL-5 targeted ribozymes
  JOURNAL   Patent: US 5616488-A 709 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        913 GATTCCTGTTCCTGTACA 930
              ||||||||||||||||||
Db          1 GATTCCTGTTCCTGTACA 18


RESULT 151
I39769
LOCUS       I39769                   18 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 42 from patent US 5616490.
ACCESSION   I39769
VERSION     I39769.1  GI:2084249
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 42 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        596 CCTACGTGTATGCCATCC 613
              ||||||||||||||||||
Db          1 CCTACGTGTATGCCATCC 18


RESULT 152
I39781
LOCUS       I39781                   18 bp    DNA     linear   PAT 13-MAY-1997
DEFINITION  Sequence 54 from patent US 5616490.
ACCESSION   I39781
VERSION     I39781.1  GI:2084261
KEYWORDS    .
SOURCE      Unknown.
  ORGANISM  Unknown.
            Unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Sullivan,S.M. and Draper,K.G.
  TITLE     Ribozymes targeted to TNF-.alpha. RNA
  JOURNAL   Patent: US 5616490-A 54 01-APR-1997;
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unknown"
                     /mol_type="unassigned DNA"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2504 GAAATGGTTAAGAATTTG 2521
              ||||||||||||||||||
Db          1 GAAATGGTTAAGAATTTG 18


RESULT 153
AX635768
LOCUS       AX635768                 18 bp    RNA     linear   PAT 21-FEB-2003
DEFINITION  Sequence 2907 from Patent EP1260586.
ACCESSION   AX635768
VERSION     AX635768.1  GI:28471382
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1
  AUTHORS   Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A.,
            Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J.,
            Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M.,
            Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
            Woolf,T.
  TITLE     Method and reagent for inhibiting the expression of disease related
            genes
  JOURNAL   Patent: EP 1260586-A 2907 27-NOV-2002;
            RIBOZYME PHARMACEUTICALS, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
```

```
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        588 TGGAGCTGCCTACGTGTA 605
              ||||||||||||||||||
Db          1 TGGAGCTGCCTACGTGTA 18


RESULT 154
AX635770
LOCUS       AX635770                  18 bp    RNA     linear   PAT 21-FEB-2003
DEFINITION  Sequence 2909 from Patent EP1260586.
ACCESSION   AX635770
VERSION     AX635770.1  GI:28471384
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1
  AUTHORS   Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A.,
            Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J.,
            Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M.,
            Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
            Woolf,T.
  TITLE     Method and reagent for inhibiting the expression of disease related
            genes
  JOURNAL   Patent: EP 1260586-A 2909 27-NOV-2002;
            RIBOZYME PHARMACEUTICALS, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        653 TGGCACTGCTTTCTACTC 670
              ||||||||||||||||||
Db          1 TGGCACTGCTTTCTACTC 18


RESULT 155
AX635772
LOCUS       AX635772                  18 bp    RNA     linear   PAT 21-FEB-2003
DEFINITION  Sequence 2911 from Patent EP1260586.
ACCESSION   AX635772
VERSION     AX635772.1  GI:28471386
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1
  AUTHORS   Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A.,
            Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J.,
            Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M.,
            Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
            Woolf,T.
  TITLE     Method and reagent for inhibiting the expression of disease related
            genes
  JOURNAL   Patent: EP 1260586-A 2911 27-NOV-2002;
            RIBOZYME PHARMACEUTICALS, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        674 GAACTCTGCTGATAGCCA 691
              ||||||||||||||||||
Db          1 GAACTCTGCTGATAGCCA 18


RESULT 156
AX635774
LOCUS       AX635774                  18 bp    RNA     linear   PAT 21-FEB-2003
DEFINITION  Sequence 2913 from Patent EP1260586.
ACCESSION   AX635774
VERSION     AX635774.1  GI:28471388
KEYWORDS    .
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1
  AUTHORS   Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A.,
            Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J.,
            Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M.,
            Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
            Woolf,T.
  TITLE     Method and reagent for inhibiting the expression of disease related
            genes
  JOURNAL   Patent: EP 1260586-A 2913 27-NOV-2002;
            RIBOZYME PHARMACEUTICALS, INC. (US)
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="unassigned RNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        913 GATTCCTGTTCCTGTACA 930
              ||||||||||||||||||
Db          1 GATTCCTGTTCCTGTACA 18


RESULT 157
BD066879/c
LOCUS       BD066879                  18 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  An antisense oligonucleotide preparation method.
ACCESSION   BD066879
VERSION     BD066879.1  GI:22612482
KEYWORDS    JP 2001511000-A/1514.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Schlingensiepen,K.H. and Brysch,W.
  TITLE     An antisense oligonucleotide preparation method
  JOURNAL   Patent: JP 2001511000-A 1514 07-AUG-2001;
            BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
COMMENT     OS   Unknown
            PN   JP 2001511000-A/1514
            PD   07-AUG-2001
            PF   30-JAN-1998 JP 1998532533
            PR   31-JAN-1997 EP   97101531.8
            PI   KARL HERMANN SCHLINGENSIEPEN,WOLFGANG BRYSCH
            PC   C12N15/11,C07H21/04,A61K31/70
            CC   An antisense oligonucleotide preparation method FH   Key
                  Location/Qualifiers
            FT   source          1. .18
            FT                   /organism='Unknown'.
FEATURES             Location/Qualifiers
     source          1. .18
                     /organism="unidentified"
                     /mol_type="genomic DNA"
                     /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
```

```
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2172 GAGTTTCTTGGTGTAATG 2189
              ||||||||||||||||||
Db         18 GAGTTTCTTGGTGTAATG 1


RESULT 158
BD066880/c
LOCUS       BD066880                 18 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  An antisense oligonucleotide preparation method.
ACCESSION   BD066880
VERSION     BD066880.1  GI:22612483
KEYWORDS    JP 2001511000-A/1515.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Schlingensiepen,K.H. and Brysch,W.
  TITLE     An antisense oligonucleotide preparation method
  JOURNAL   Patent: JP 2001511000-A 1515 07-AUG-2001;
            BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
COMMENT     OS   Unknown
            PN   JP 2001511000-A/1515
            PD   07-AUG-2001
            PF   30-JAN-1998 JP 1998532533
            PR   31-JAN-1997 EP   97101531.8
            PI   KARL HERMANN SCHLINGENSIEPEN,WOLFGANG BRYSCH
            PC   C12N15/11,C07H21/04,A61K31/70
            CC   An antisense oligonucleotide preparation method FH   Key
                 Location/Qualifiers
            FT   source          1. .18
            FT                   /organism='Unknown'.
FEATURES              Location/Qualifiers
     source           1. .18
                      /organism="unidentified"
                      /mol_type="genomic DNA"
                      /db_xref="taxon:32644"

  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAG 2198
              ||||||||||||||||||
Db         18 GGTGTAATGAACACCGAG 1


RESULT 159
BD066881/c
LOCUS       BD066881                 18 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  An antisense oligonucleotide preparation method.
ACCESSION   BD066881
VERSION     BD066881.1  GI:22612484
KEYWORDS    JP 2001511000-A/1516.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Schlingensiepen,K.H. and Brysch,W.
  TITLE     An antisense oligonucleotide preparation method
  JOURNAL   Patent: JP 2001511000-A 1516 07-AUG-2001;
            BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
COMMENT     OS   Unknown
            PN   JP 2001511000-A/1516
            PD   07-AUG-2001
            PF   30-JAN-1998 JP 1998532533
            PR   31-JAN-1997 EP   97101531.8
            PI   KARL HERMANN SCHLINGENSIEPEN,WOLFGANG BRYSCH
            PC   C12N15/11,C07H21/04,A61K31/70
            CC   An antisense oligonucleotide preparation method FH   Key
                 Location/Qualifiers
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  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2195 CGAGTGGATAATAGAAAG 2212
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Db         18 CGAGTGGATAATAGAAAG 1


RESULT 160
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LOCUS       BD066882                 18 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  An antisense oligonucleotide preparation method.
ACCESSION   BD066882
VERSION     BD066882.1  GI:22612485
KEYWORDS    JP 2001511000-A/1517.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Schlingensiepen,K.H. and Brysch,W.
  TITLE     An antisense oligonucleotide preparation method
  JOURNAL   Patent: JP 2001511000-A 1517 07-AUG-2001;
            BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
COMMENT     OS   Unknown
            PN   JP 2001511000-A/1517
            PD   07-AUG-2001
            PF   30-JAN-1998 JP 1998532533
            PR   31-JAN-1997 EP   97101531.8
            PI   KARL HERMANN SCHLINGENSIEPEN,WOLFGANG BRYSCH
            PC   C12N15/11,C07H21/04,A61K31/70
            CC   An antisense oligonucleotide preparation method FH   Key
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  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
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Qy       2210 AAGTTGAGACTAAACTGG 2227
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RESULT 161
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LOCUS       BD066883                 18 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  An antisense oligonucleotide preparation method.
ACCESSION   BD066883
VERSION     BD066883.1  GI:22612486
KEYWORDS    JP 2001511000-A/1518.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Schlingensiepen,K.H. and Brysch,W.
  TITLE     An antisense oligonucleotide preparation method
  JOURNAL   Patent: JP 2001511000-A 1518 07-AUG-2001;
            BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
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COMMENT     OS   Unknown
            PN   JP 2001511000-A/1518
            PD   07-AUG-2001
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            PI   KARL HERMANN SCHLINGENSIEPEN,WOLFGANG BRYSCH
            PC   C12N15/11,C07H21/04,A61K31/70
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  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db         18 GTTGAGACTAAACTGGTT 1


RESULT 162
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LOCUS       BD066884                 18 bp    DNA     linear   PAT 27-AUG-2002
DEFINITION  An antisense oligonucleotide preparation method.
ACCESSION   BD066884
VERSION     BD066884.1  GI:22612487
KEYWORDS    JP 2001511000-A/1519.
SOURCE      unidentified
  ORGANISM  unidentified
            unclassified.
REFERENCE   1  (bases 1 to 18)
  AUTHORS   Schlingensiepen,K.H. and Brysch,W.
  TITLE     An antisense oligonucleotide preparation method
  JOURNAL   Patent: JP 2001511000-A 1519 07-AUG-2001;
            BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
COMMENT     OS   Unknown
            PN   JP 2001511000-A/1519
            PD   07-AUG-2001
            PF   30-JAN-1998 JP 1998532533
            PR   31-JAN-1997 EP   97101531.8
            PI   KARL HERMANN SCHLINGENSIEPEN,WOLFGANG BRYSCH
            PC   C12N15/11,C07H21/04,A61K31/70
            CC   An antisense oligonucleotide preparation method FH   Key
                  Location/Qualifiers
            FT   source          1. .18
            FT                   /organism='Unknown'.
FEATURES             Location/Qualifiers
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  Query Match             0.6%;  Score 18;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
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Db         18 GAGACTAAACTGGTTTGT 1


Search completed: December 14, 2004, 16:01:17
Job time : 7 secs
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OM nucleic - nucleic search, using sw model

Run on: December 14, 2004, 16:05:30 ; Search time 8 Seconds
(without alignments)
4.201 Million cell updates/sec

Title: US-10-679-532-78
Perfect score: 3230
Sequence: 1 ATCCTAATCAAGACCCCAGT.....AAAACTTCTCTCAAGGATCC 3230

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 234 seqs, 5203 residues

Total number of hits satisfying chosen parameters: 468

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 237 summaries

Database : rngdb:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	50	1.5	50	1	AAQ69464	Human interleukin
	2	50	1.5	50	1	AAT63926	Human interleukin-
	3	50	1.5	50	1	AAX17214	Test sequence from
	4	50	1.5	50	1	ABK82705	DNA binding molecu
	5	50	1.5	50	1	ABZ03720	Human leukocyte ge
	6	50	1.5	50	1	ABZ02014	Human leukocyte ge
	7	50	1.5	50	1	ADG33606	Human DNA probe us
	8	50	1.5	50	1	ADE80244	Duplex oligonucleo
c	9	41.2	1.3	42	1	AAZ55589	Degenerate mammali
	10	34	1.1	34	1	AAQ57198	Enzymatic RNA mole
c	11	33	1.0	33	1	AAT38975	Interleukin IL-5 3
c	12	33	1.0	33	1	AAT47001	Interleukin-5 prim
c	13	32	1.0	32	1	AAT76227	Human IL5 antisens
c	14	32	1.0	32	1	AAX54023	Human IL-5 antisen
c	15	32	1.0	32	1	AAA33467	Low adenosine anti
c	16	32	1.0	32	1	AAF19589	Human IL5 polynucl
c	17	32	1.0	32	1	ABZ95283	Human IL-5 antisen
c	18	32	1.0	32	1	ABD19257	Human IL5 DNA frag
	19	30	0.9	30	1	ABN89420	Human IL5h related
c	20	29	0.9	29	1	AAQ86377	Interleukin-5 dete
c	21	29	0.9	29	1	ABX75428	Human interleukin
	22	28	0.9	28	1	AAF74303	Canine interleukin
c	23	28	0.9	28	1	ABK65968	Human gene specifi
c	24	28	0.9	28	1	ABK14340	Human interleukin-
	25	27	0.8	27	1	AAQ57191	Enzymatic RNA mole
c	26	27	0.8	27	1	ABN89421	Human IL5h related
	27	27	0.8	27	1	ACF04471	Real time PCR targ
	28	26	0.8	26	1	ABK65967	Human gene specifi
c	29	25.4	0.8	27	1	AAZ55590	Degenerate mammali
c	30	25	0.8	25	1	AAT76224	Human IL5 antisens
c	31	25	0.8	25	1	AAX54020	Human IL-5 antisen
c	32	25	0.8	25	1	AAA33464	Low adenosine anti
c	33	25	0.8	25	1	AAF19586	Human IL5 polynucl
	34	25	0.8	25	1	ABK14339	Human interleukin-
c	35	25	0.8	25	1	ABZ95280	Human IL-5 antisen
c	36	25	0.8	25	1	ABD19254	Human IL5 DNA frag
	37	24	0.7	24	1	AAT75363	cDNA synthesis pri
	38	24	0.7	24	1	AAV59945	PCR primer IL5-1 u
	39	23	0.7	23	1	AAT50760	Ovine IL-5 gene fo
c	40	23	0.7	23	1	ABS52410	Mouse Interleukin
c	41	23	0.7	23	1	ABS63333	Interleukin-5 PCR
	42	22.4	0.7	27	1	AAX99415	Artificial sequenc
	43	22	0.7	22	1	AAQ57190	Enzymatic RNA mole
	44	22	0.7	22	1	AAQ57194	Enzymatic RNA mole
c	45	22	0.7	22	1	AAQ74032	Human interleukin
	46	22	0.7	22	1	AAQ74031	Human interleukin
	47	22	0.7	22	1	AAV01432	Human CLE0 spannin
	48	22	0.7	22	1	AAT47000	Interleukin-5 prim
c	49	22	0.7	22	1	AAT76225	Human IL5 antisens
c	50	22	0.7	22	1	AAX54021	Human IL-5 antisen
c	51	22	0.7	22	1	AAA33465	Low adenosine anti
c	52	22	0.7	22	1	AAF19587	Human IL5 polynucl
	53	22	0.7	22	1	AAF25544	Multiplex PCR prim
c	54	22	0.7	22	1	AAF25545	Multiplex PCR prim
c	55	22	0.7	22	1	ABZ95281	Human IL-5 antisen
c	56	22	0.7	22	1	ABD19255	Human IL5 DNA frag
	57	21	0.7	21	1	AAQ86376	Interleukin-5 dete
	58	21	0.7	21	1	AAT38974	Interleukin IL-5 5
	59	21	0.7	21	1	AAV01427	IL-5 promoter wild
c	60	21	0.7	21	1	AAT76221	Human IL5 antisens
c	61	21	0.7	21	1	AAT75364	cDNA synthesis pri
c	62	21	0.7	21	1	AAV59946	PCR primer IL4-2 u
c	63	21	0.7	21	1	AAX54017	Human IL-5 antisen
c	64	21	0.7	21	1	AAA33461	Low adenosine anti
c	65	21	0.7	21	1	AAF19583	Human IL5 polynucl
	66	21	0.7	21	1	ABS52409	Mouse Interleukin
	67	21	0.7	21	1	ABS52421	Primer extension r
	68	21	0.7	21	1	ABS63346	Target specific PC
	69	21	0.7	21	1	ABS63332	Interleukin-5 PCR
c	70	21	0.7	21	1	ACF04470	Real time PCR targ
c	71	21	0.7	21	1	ABZ95277	Human IL-5 antisen
c	72	21	0.7	21	1	ABD19251	Human IL5 DNA frag
c	73	20	0.6	20	1	AAT50761	Ovine IL-5 gene re
c	74	20	0.6	20	1	AAT76226	Human IL5 antisens
c	75	20	0.6	20	1	AAX54022	Human IL-5 antisen
c	76	20	0.6	20	1	AAA33466	Low adenosine anti
c	77	20	0.6	20	1	AAC73702	Human IL-5 antisen
c	78	20	0.6	20	1	AAC73705	Human IL-5 antisen
c	79	20	0.6	20	1	AAC73708	Human IL-5 antisen
c	80	20	0.6	20	1	AAC73686	Human IL-5 antisen
c	81	20	0.6	20	1	AAC73714	Human IL-5 antisen
c	82	20	0.6	20	1	AAC73691	Human IL-5 antisen
c	83	20	0.6	20	1	AAC73697	Human IL-5 antisen
c	84	20	0.6	20	1	AAC73711	Human IL-5 antisen
c	85	20	0.6	20	1	AAC73713	Human IL-5 antisen
c	86	20	0.6	20	1	AAC73718	Human IL-5 antisen
c	87	20	0.6	20	1	AAC73699	Human IL-5 antisen
c	88	20	0.6	20	1	AAC73710	Human IL-5 antisen
c	89	20	0.6	20	1	AAC73712	Human IL-5 antisen
c	90	20	0.6	20	1	AAC73715	Human IL-5 antisen
c	91	20	0.6	20	1	AAC73690	Human IL-5 antisen
c	92	20	0.6	20	1	AAC73693	Human IL-5 antisen
c	93	20	0.6	20	1	AAC73694	Human IL-5 antisen
c	94	20	0.6	20	1	AAC73703	Human IL-5 antisen
c	95	20	0.6	20	1	AAC73687	Human IL-5 antisen
c	96	20	0.6	20	1	AAC73700	Human IL-5 antisen
c	97	20	0.6	20	1	AAC73701	Human IL-5 antisen
c	98	20	0.6	20	1	AAC73696	Human IL-5 antisen
c	99	20	0.6	20	1	AAC73716	Human IL-5 antisen
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c	101	20	0.6	20	1	AAC73692	Human IL-5 antisen
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c	103	20	0.6	20	1	AAC73689	Human IL-5 antisen
c	104	20	0.6	20	1	AAC73707	Human IL-5 antisen
c	105	20	0.6	20	1	AAC73709	Human IL-5 antisen
c	106	20	0.6	20	1	AAC73706	Human IL-5 antisen

c 107	20	0.6	20	1	AAC73695	Human IL-5 antisen
c 108	20	0.6	20	1	AAC73688	Human IL-5 antisen
c 109	20	0.6	20	1	AAC73704	Human IL-5 antisen
c 110	20	0.6	20	1	AAF19588	Human IL5 polynucl
c 111	20	0.6	20	1	ABX04348	Human Interleukin
c 112	20	0.6	20	1	ABX04353	Human Interleukin
c 113	20	0.6	20	1	ABX04372	Human Interleukin
c 114	20	0.6	20	1	ABX04344	Human Interleukin
c 115	20	0.6	20	1	ABX04342	Human Interleukin
c 116	20	0.6	20	1	ABX04358	Human Interleukin
c 117	20	0.6	20	1	ABX04364	Human Interleukin
c 118	20	0.6	20	1	ABX04352	Human Interleukin
c 119	20	0.6	20	1	ABX04361	Human Interleukin
c 120	20	0.6	20	1	ABX04368	Human Interleukin
c 121	20	0.6	20	1	ABX04345	Human Interleukin
c 122	20	0.6	20	1	ABX04354	Human Interleukin
c 123	20	0.6	20	1	ABX04367	Human Interleukin
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c 128	20	0.6	20	1	ABX04341	Human Interleukin
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c 133	20	0.6	20	1	ABX04371	Human Interleukin
c 134	20	0.6	20	1	ABX04355	Human Interleukin
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c 138	20	0.6	20	1	ABX04343	Human Interleukin
c 139	20	0.6	20	1	ABX04366	Human Interleukin
c 140	20	0.6	20	1	ABX04340	Human Interleukin
c 141	20	0.6	20	1	ABX04349	Human Interleukin
c 142	20	0.6	20	1	ABX04350	Human Interleukin
c 143	20	0.6	20	1	ABX04365	Human Interleukin
144	20	0.6	20	1	ACF04469	Real time PCR targ
c 145	20	0.6	20	1	ABZ95282	Human IL-5 antisen
c 146	20	0.6	20	1	ABD19256	Human IL5 DNA frag
c 147	20	0.6	20	1	ADR12029	Human interleukin-
c 148	20	0.6	20	1	ADR12040	Human interleukin-
c 149	20	0.6	20	1	ADR12019	Human interleukin-
c 150	20	0.6	20	1	ADR12025	Human interleukin-
c 151	20	0.6	20	1	ADR12033	Human interleukin-
c 152	20	0.6	20	1	ADR12034	Human interleukin-
c 153	20	0.6	20	1	ADR12021	Human interleukin-
c 154	20	0.6	20	1	ADR12027	Human interleukin-
c 155	20	0.6	20	1	ADR12031	Human interleukin-
c 156	20	0.6	20	1	ADR12043	Human interleukin-
c 157	20	0.6	20	1	ADR12039	Human interleukin-
c 158	20	0.6	20	1	ADR12042	Human interleukin-
c 159	20	0.6	20	1	ADR12041	Human interleukin-
c 160	20	0.6	20	1	ADR12020	Human interleukin-
c 161	20	0.6	20	1	ADR12037	Human interleukin-
c 162	20	0.6	20	1	ADR12044	Human interleukin-
c 163	20	0.6	20	1	ADR12047	Human interleukin-
c 164	20	0.6	20	1	ADR12048	Human interleukin-
c 165	20	0.6	20	1	ADR12017	Human interleukin-
c 166	20	0.6	20	1	ADR12024	Human interleukin-
c 167	20	0.6	20	1	ADR12026	Human interleukin-
c 168	20	0.6	20	1	ADR12028	Human interleukin-
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c 171	20	0.6	20	1	ADR12036	Human interleukin-
c 172	20	0.6	20	1	ADR12023	Human interleukin-
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c 178	20	0.6	20	1	ADR12032	Human interleukin-
c 179	20	0.6	20	1	ADR12046	Human interleukin-
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c 181	19.2	0.6	50	1	ABZ03720	Human leukocyte ge
c 182	19.2	0.6	50	1	ABZ02014	Human leukocyte ge
c 183	19.2	0.6	50	1	ADG33606	Human DNA probe us
c 184	19	0.6	19	1	AAT76223	Human IL5 antisens
c 185	19	0.6	19	1	AAX54019	Human IL-5 antisen
c 186	19	0.6	19	1	AAA33463	Low adenosine anti
c 187	19	0.6	19	1	AAF19585	Human IL5 polynucl
c 188	19	0.6	19	1	ABZ95279	Human IL-5 antisen
c 189	19	0.6	19	1	ABD19253	Human IL5 DNA frag
c 190	18.8	0.6	22	1	AAF74302	Canine interleukin
c 191	18.4	0.6	20	1	AAC73662	Murine IL-5 antise
c 192	18.4	0.6	20	1	AAC73722	Human IL-5 antisen
c 193	18.4	0.6	20	1	AAC73719	Human IL-5 antisen
194	18.4	0.6	20	1	AAF74301	Canine interleukin
c 195	18.4	0.6	20	1	ABX04376	Human Interleukin
c 196	18.4	0.6	20	1	ABX04373	Human Interleukin
c 197	18.4	0.6	20	1	ABX04316	Mouse Interleukin
c 198	18.4	0.6	20	1	ADR12050	Human interleukin-
c 199	18.4	0.6	20	1	ADR11993	Murine interleukin
c 200	18.4	0.6	20	1	ADR12053	Human interleukin-
201	18	0.6	18	1	AAQ57192	Enzymatic RNA mole
202	18	0.6	18	1	AAT54734	Human IL-5 hammerh
203	18	0.6	18	1	AAT54731	Human IL-5 hammerh
204	18	0.6	18	1	AAT54732	Human IL-5 hammerh
205	18	0.6	18	1	AAT54733	Human IL-5 hammerh
c 206	18	0.6	18	1	AAT76222	Human IL5 antisens
c 207	18	0.6	18	1	AAT76220	Human IL5 antisens
c 208	18	0.6	18	1	AAX54018	Human IL-5 antisen
c 209	18	0.6	18	1	AAX54016	Human IL-5 antisen
c 210	18	0.6	18	1	AAA33462	Low adenosine anti
c 211	18	0.6	18	1	AAA33460	Low adenosine anti
c 212	18	0.6	18	1	AAF19582	Human IL5 polynucl
c 213	18	0.6	18	1	AAF19584	Human IL5 polynucl
214	18	0.6	18	1	ABX03869	DNA encoding secre
c 215	18	0.6	18	1	ABZ95278	Human IL-5 antisen
c 216	18	0.6	18	1	ABZ95276	Human IL-5 antisen
c 217	18	0.6	18	1	ABD19250	Human IL5 DNA frag
c 218	18	0.6	18	1	ABD19252	Human IL5 DNA frag
219	18	0.6	21	1	AAV01431	IL-5 promoter muta
c 220	17.4	0.5	19	1	AAH19614	Mouse IL-5 antisen
221	17.4	0.5	19	1	ADG64618	Human G72 siNA oli
c 222	17.4	0.5	19	1	ADG64562	Human G72 siNA oli
223	17.4	0.5	20	1	AAH19613	Mouse IL-5 PCR pri
224	17	0.5	17	1	AAQ57189	Enzymatic RNA mole
225	17	0.5	21	1	AAV01430	IL-5 promoter muta
c 226	16.8	0.5	20	1	AAC73663	Murine IL-5 antise
c 227	16.8	0.5	20	1	ABX04317	Mouse Interleukin
c 228	16.8	0.5	20	1	ABZ89011	Human oligonucleot
c 229	16.8	0.5	20	1	ABD25241	AI051839-derived o
c 230	16.8	0.5	20	1	ADK79725	Chimeric phosphoro
c 231	16.8	0.5	20	1	ADK79309	Chimeric phosphoro
c 232	16.8	0.5	20	1	ADR11994	Murine interleukin
233	16.4	0.5	20	1	AAV32489	Human retinaldehyd
c 234	16.4	0.5	20	1	AAX96157	PCR primer used to
235	16.4	0.5	20	1	AAZ55851	Human retinaldehyd
c 236	16.4	0.5	20	1	ABZ93890	Human oligonucleot
c 237	16.4	0.5	20	1	ABD30120	AA677534-derived o

ALIGNMENTS

RESULT 1
AAQ69464
ID AAQ69464 standard; DNA; 50 BP.
XX
AC AAQ69464;
XX
DT 25-MAR-2003 (revised)
DT 27-FEB-1995 (first entry)
XX
DE Human interleukin 5 (IL-5) gene, target region.

```
XX
KW   DNA protein-binding assay; test sequence; screening sequence; promoter;
KW   target; TATA box; Herpes Simplex Virus; HSV; origin of replication; UL9;
KW   transcription factor; TFIID: ds.
XX
OS   Synthetic.
XX
PN   WO9414980-A1.
XX
PD   07-JUL-1994.
XX
PF   20-DEC-1993;   93WO-US012388.
XX
PR   23-DEC-1992;   92US-00996783.
PR   17-SEP-1993;   93US-00123936.
XX
PA   (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI   Edwards CA,  Cantor CR,  Andrews BM,  Turin LM,  Fry KE;
XX
DR   WPI; 1994-234711/28.
XX
PT   Sequence-directed DNA-binding molecules - useful in pharmaceuticals and
PT   as molecular reagents.
XX
PS   Claim 28; Page 319; 587pp; English.
XX
CC   A DNA protein-binding assay is provided, useful for screening libraries
CC   of synthetic or biological cpds. for their ability to bind DNA test
CC   sequences. The assay is versatile in that any number of test sequences
CC   can be tested by placing the test sequence adjacent to a defined protein-
CC   binding screening sequence. Binding of mols. to these test sequences
CC   changes the binding characteristics of the protein mol. to its cognate
CC   binding sequence. When such a mol. binds the test sequence, the
CC   equilibrium of the DNA:protein complexes is disturbed, generating changes
CC   in the concentration of free DNA probe. One application of this method is
CC   to eucaryotic general transcription factors (e.g. TFIID), where the
CC   target region is typically selected from DNA sequences adjacent to the
CC   binding site for the eucaryotic transcription factor. Numerous exemplary
CC   test sequences are given: the sequences in AAQ69251-731 and AAQ69850
CC   correspond to promoter targets (typically, TATA box-contg. sites) for
CC   human genes and the sequences in AAQ69732-849 correspond to promoter
CC   targets for viral genes. The test sequences may also be randomly
CC   generated. DNA:protein interaction may be used for screening purposes,
CC   e.g. the Herpes Simplex Virus (HSV) origin of replication and UL9 (see
CC   AAQ69851-52, AAQ69865 and AAQ69891). (Updated on 25-MAR-2003 to correct
CC   PN field.)
XX
SQ   Sequence 50 BP; 16 A; 11 C; 10 G; 13 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 3.8;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 2
AAT63926
ID   AAT63926 standard; DNA; 50 BP.
XX
AC   AAT63926;
XX
DT   25-MAR-2003  (revised)
DT   17-MAR-1997  (first entry)
XX
DE   Human interleukin-5 gene TFIID binding site.
XX
KW   Duplex DNA; target region; binding characteristic; DNA binding protein;
KW   TFIID; transcription factor; binding site; inhibition; enhance; IL-2;
KW   cancer; inherited genetic disorder; alpha-D-galactosidase A; ds.
XX
OS   Homo sapiens.
XX
PN   US5578444-A.
XX
PD   26-NOV-1996.
XX
PF   20-DEC-1993;   93US-00171389.
XX
PR   27-JUN-1991;   91US-00723618.
PR   23-DEC-1992;   92US-00996783.
PR   17-SEP-1993;   93US-00123936.
XX
PA   (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI   Fry KE,  Turin LM,  Andrews BM,  Cantor CR,  Edwards CA;
XX
DR   WPI; 1997-020402/02.
XX
PT   Altering binding characteristics of DNA binding proteins to duplex DNA -
PT   by attaching specific small cpd. to target region close to the protein's
PT   binding site, useful in treatment of viral disease, cancer etc.
XX
PS   Claim 6; Col 207-208; 264pp; English.
XX
CC   The sequences given in AAT63713-4312 represent duplex DNA's which act as
CC   target regions in the method of the invention. The method for altering
CC   the binding characteristics of a DNA-binding protein to duplex DNA
CC   comprises contacting the duplex DNA with a small molecule which binds
CC   sequence-specifically to a target region, where, when the small molecule
CC   is bound to the target region, it is adjacent to, but not overlapping by
CC   more than 4 bp, a binding site for a DNA-binding protein. The small
CC   molecule is added at a concentration effective to alter the binding of
CC   the DNA binding protein, pref. TFIID, to its binding site on the duplex
CC   DNA. The binding of the small molecule may inhibit or enhance the binding
CC   of the DNA-binding protein to its binding site. The compounds isolated
CC   using this method are potentially useful as therapeutic agents for
CC   treatment of any disease which involves a specific DNA sequence, e.g.
CC   cancer, or inherited genetic disorders etc. The method is suitable for
CC   screening large biological or chemical libraries and allows determination
CC   of sequence-specific and relative affinities of known DNA-binding agents
CC   for different DNA sequences. The design of these duplex DNA's allows a
CC   single DNA:protein interaction to be used for screening sequence-
CC   specific, or preferential, DNA binding proteins that recognise almost any
CC   possible sequence (see also AAT49539- 74). (Updated on 25-MAR-2003 to
CC   correct PF field.)
XX
SQ   Sequence 50 BP; 16 A; 11 C; 10 G; 13 T; 0 U; 0 Other;

  Query Match             1.5%;  Score 50;  DB 1;  Length 50;
  Best Local Similarity   100.0%;  Pred. No. 3.8;
  Matches   50;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50


RESULT 3
AAX17214
ID   AAX17214 standard; DNA; 50 BP.
XX
AC   AAX17214;
XX
DT   06-MAY-1999  (first entry)
XX
DE   Test sequence from human interleukin 5 (IL-5) gene.
XX
KW   Test sequence; DNA-binding molecule; screening sequence; human;
KW   nucleic acid amplification; target; viral; ds.
XX
OS   Homo sapiens.
XX
```

PN US5869241-A.
XX
PD 09-FEB-1999.
XX
PF 07-JUN-1995; 95US-00475228.
XX
PR 27-JUN-1991; 91US-00723618.
PR 23-DEC-1992; 92US-00996783.
PR 17-SEP-1993; 93US-00123936.
PR 20-DEC-1993; 93US-00171389.
XX
PA (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI Fry KE, Turin LM, Andrews BM, Cantor CR, Edwards CA;
XX
DR WPI; 1999-152755/13.
XX
PT Determination of DNA sequence preference of a DNA-binding molecule -
PT based on inhibition of binding of protein to oligonucleotide sequence
PT attached to test sequence.
XX
PS Claim 3; Col 209-210; 270pp; English.
XX
CC Sequences AAX17001 to AAX17600 represent specifically claimed target test
CC sequences that are used in the method of the invention of determining the
CC DNA sequence preference of a DNA-binding molecule. The method comprises:
CC (i) adding a test molecule and a DNA-binding protein to a mixture of
CC duplex DNA test oligonucleotides, each of the test oligonucleotides
CC having a test sequence adjacent to a screening sequence, where the
CC screening sequence binds to the DNA-binding protein with a binding
CC affinity that is independent of the DNA sequence of the test sequence,
CC and where the mixture of duplex DNA test oligonucleotides includes
CC several test sequences; (ii) incubating the test molecule, the mixture of
CC duplex DNA test oligonucleotides and the DNA-binding protein for a time
CC sufficient to permit binding of the test molecule to test sequences in
CC the duplex DNA; (iii) separating unbound test oligonucleotides from test
CC oligonucleotides bound to binding protein; (iv) amplifying the unbound
CC test oligonucleotides; (v) repeating steps (ii) to (iv); (vi) isolating
CC the amplified test oligonucleotides; and (vii) sequencing the isolated
CC test oligonucleotides. Test sequences AAX17001-X17481 and AAX17600
CC correspond to promoter targets for human genes and test sequences
CC AAX17482-X17599 correspond to promoter targets for viral genes
XX
SQ Sequence 50 BP; 16 A; 11 C; 10 G; 13 T; 0 U; 0 Other;

Query Match 1.5%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 3.8;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50

RESULT 4
ABK82705
ID ABK82705 standard; DNA; 50 BP.
XX
AC ABK82705;
XX
DT 27-AUG-2002 (first entry)
XX
DE DNA binding molecule screening method test sequence #214.
XX
KW DNA binding molecule screening; inhibition of transcription; infection;
KW human immunodeficiency virus; HIV; parasite; cancer; cardiovascular;
KW respiratory; gastrointestinal; endocrine; metabolic; rheumatic;
KW immunological; haematological; neurological; psychiatric; dermatological;
KW ophthalmological; musculo-skeletal; urogenital disorder; ss.
XX
OS Synthetic.
XX
PN US6384208-B1.
XX
PD 07-MAY-2002.
XX
PF 15-JUL-1999; 99US-00354947.
XX
PR 27-JUN-1991; 91US-00723618.
PR 23-DEC-1992; 92US-00996783.
PR 17-SEP-1993; 93US-00123936.
PR 20-DEC-1993; 93US-00171389.
PR 07-JUN-1995; 95US-00482080.
XX
PA (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI Edwards CA, Cantor CR, Andrews BM, Turin LM, Fry KE;
XX
DR WPI; 2002-442819/47.
XX
PT Decreasing transcriptional activity of genes for treating infections or
PT cancer, by administration of an agent that binds to two non-overlapping
PT regions of the gene.
XX
PS Example 15; SEQ ID NO 214; 98pp; English.
XX
CC The invention relates to a method of decreasing transcriptional activity
CC in a duplex deoxyribonucleic acid (DNA) template (T1) comprising
CC contacting (T1) with a binding agent comprising at least one small duplex
CC DNA-binding molecule (T2) coupled to at least one other small duplex-
CC binding molecule that binds to a non-overlapping region of target
CC sequence (TS). The method is useful for inhibiting transcription of a
CC range of disease-related genes for treating infections (by viruses,
CC including human immunodeficiency virus, bacteria, fungi, protozoa and
CC parasites), cancer, cardiovascular, respiratory, gastrointestinal,
CC endocrine/metabolic, rheumatic/immunological, haematological,
CC neurological, psychiatric, dermatological, ophthalmological, musculo-
CC skeletal, genetic or urogenital disorders. The method provides sequence-
CC specific inhibition of transcription of pathological genes without
CC affecting transcription of cellular genes regulated by the same
CC transcription factor, and can be applied to regulation of any gene.
CC ABK82492-ABK83155 represent DNA binding molecule test sequences used in
CC the method of the invention
XX
SQ Sequence 50 BP; 16 A; 11 C; 10 G; 13 T; 0 U; 0 Other;

Query Match 1.5%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 3.8;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50

RESULT 5
ABZ03720
ID ABZ03720 standard; DNA; 50 BP.
XX
AC ABZ03720;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 3711.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX

PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertermous T, Johnson F;
XX
DR WPI; 2002-636525/68.
XX
PT New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT or congestive heart failure, comprises diagnostic oligonucleotides.
XX
PS Claim 1; Page 445; 0pp; English.
XX
CC The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a
CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;

Query Match 1.5%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 3.8;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2327 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 2376
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 50

RESULT 6
ABZ02014
ID ABZ02014 standard; DNA; 50 BP.
XX
AC ABZ02014;
XX
DT 09-JAN-2003 (first entry)
XX
DE Human leukocyte gene expression profiling probe SEQ ID NO 2005.
XX
KW T7; leukocyte; gene expression profiling; allograft rejection;
KW atherosclerosis; congestive heart failure; systemic lupus erythematosus;
KW rheumatoid arthritis; osteoarthritis; cytomegalovirus; infection; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200257414-A2.
XX
PD 25-JUL-2002.
XX
PF 22-OCT-2001; 2001WO-US047856.
XX
PR 20-OCT-2000; 2000US-0241994P.
PR 08-JUN-2001; 2001US-0296764P.
XX
PA (BIOC-) BIOCARDIA INC.
XX
PI Wohlgemuth J, Fry K, Matcuk G, Altman P, Prentice J, Phillips J;
PI Ly N, Woodward R, Quertermous T, Johnson F;
XX
DR WPI; 2002-636525/68.
XX
PT New system for leukocyte expression profiling, diagnosing a disease, or
PT monitoring (the rate of) progression of a disease, e.g. atherosclerosis
PT or congestive heart failure, comprises diagnostic oligonucleotides.
XX
PS Claim 1; Page 390; 0pp; English.
XX
CC The invention relates to a system for detecting gene expression, which
CC comprises one or two isolated DNA molecules that detect expression of a
CC gene, where the gene corresponds to any of 8143 oligonucleotides
CC (ABZ00010-ABZ08152) each having 50 base pairs (bp). The system is useful
CC for leukocyte expression profiling. It is particularly useful for
CC diagnosing a disease, monitoring (rate of) progression of a disease,
CC predicting therapeutic outcome, determining prognosis for a patient,
CC predicting disease complications in an individual or monitoring response
CC to treatment in an individual. The diseases include cardiac allograft
CC rejection, kidney allograft rejection, liver allograft rejection,
CC atherosclerosis, congestive heart failure, systemic lupus erythematosus,
CC rheumatoid arthritis, osteoarthritis or cytomegalovirus infection
XX
SQ Sequence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;

Query Match 1.5%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 3.8;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2327 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 2376
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 50

RESULT 7
ADG33606
ID ADG33606 standard; DNA; 50 BP.
XX
AC ADG33606;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human DNA probe used to monitor expression of diagnostic genes SeqID930.
XX
KW human; ss; autoimmune; chronic inflammatory disease; SLE;
KW systemic lupus erythematosis; rheumatoid arthritis; cholecystitis;
KW Sjogren's disease; CREST syndrome; scleroderma; ankylosing spondylitis;
KW ulcerative colitis; primary sclerosing cholangitis; appendicitis;
KW diverticulitis; primary biliary sclerosis; probe.
XX
OS Homo sapiens.
XX
PN WO2003090694-A2.
XX
PD 06-NOV-2003.
XX
PF 24-APR-2003; 2003WO-US013015.
XX
PR 24-APR-2002; 2002US-00131827.
XX
PA (EXPR-) EXPRESSION DIAGNOSTICS INC.
XX
PI Wohlgemuth J, Fry K, Woodward R, Ly N;
XX
DR WPI; 2003-877243/81.
XX
PT Diagnosing or monitoring autoimmune and chronic inflammatory diseases,
PT such as rheumatoid arthritis, systemic lupus erythematosus, ulcerative
PT colitis, psoriasis and asthma by detecting the expression level of one or
PT more genes.
XX
PS Claim 1; SEQ ID NO 930; 877pp; English.
XX
CC This invention relates to novel methods for diagnosing and monitoring
CC autoimmune and chronic inflammatory diseases. Specifically, it refers to

CC the identification of genes that have a clinical utility as diagnostic
CC tools for the management of, in particular, patients with systemic lupus
CC erythematosis (SLE) or rheumatoid arthritis (RA). Accordingly, the
CC present invention describes a method for determining the levels of
CC multiple differentially expressed genes of a patient, in a concerted
CC manner, in order to achieve an improved diagnostic assay with sensitivity
CC and specificity for the disease in question. As such, these genes are
CC useful for the diagnosis of various other inflammatory disorders
CC including cholecystitis, Sjogren's disease, CREST syndrome, scleroderma,
CC ankylosing spondylitis, ulcerative colitis, primary sclerosing
CC cholangitis, appendicitis, diverticulitis, and primary biliary sclerosis.
CC This oligonucleotide is a human DNA probe used to monitor the expression
CC level of the differentially expressed diagnostic genes of the invention.
XX
SQ Sequence 50 BP; 19 A; 9 C; 11 G; 11 T; 0 U; 0 Other;

Query Match 1.5%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 3.8;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2327 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 2376
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 TCAGAGGGAAAGTAAATATTTCAGGCATACTGACACTTTGCCAGAAAGCA 50

RESULT 8
ADE80244
ID ADE80244 standard; DNA; 50 BP.
XX
AC ADE80244;
XX
DT 29-JAN-2004 (first entry)
XX
DE Duplex oligonucleotide for DNA protein binding assay seq id 214.
XX
KW DNA-binding; duplex DNA test oligonucleotide; DNA protein binding;
KW library screening; promoter target; human; ds.
XX
OS Homo sapiens.
XX
PN US2003124530-A1.
XX
PD 03-JUL-2003.
XX
PF 13-NOV-2001; 2001US-00993346.
XX
PR 27-JUN-1991; 91US-00723618.
PR 23-DEC-1992; 92US-00996783.
PR 17-SEP-1993; 93US-00123936.
PR 20-DEC-1993; 93US-00171389.
PR 07-JUN-1995; 95US-00482080.
PR 15-JUL-1999; 99US-00354947.
XX
PA (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI Edwards CA, Cantor CR, Andrews BM, Turin LM, Fry KE;
XX
DR WPI; 2004-031270/03.
XX
PT Screening for sequence-directed DNA-binding molecules comprises adding a
PT test molecule to a test system composed of a DNA-binding protein and a
PT duplex DNA test oligonucleotide having adjacent screening and test
PT sequences.
XX
PS Claim 2; SEQ ID NO 214; 283pp; English.
XX
CC The invention describes a method for screening for molecules capable of
CC binding to a selected test sequence in a duplex DNA. The above method
CC comprises: constructing a duplex DNA test oligonucleotide having a
CC screening sequence adjacent to a selected test sequence, where a DNA-
CC binding protein is effective to bind to the screening sequence with a
CC binding affinity that is substantially independent of such test sequence,
CC but where DNA protein binding to the screening sequence is sensitive to
CC binding of test molecules to such test sequence; adding a test m
CC to be screened to a test system composed of the DNA-binding protein and
CC the duplex DNA test oligonucleotide having the screening and test
CC sequences adjacent one another; incubating the molecule in the test
CC system for a period sufficient to permit binding of the molecule being
CC tested to the test sequence in the duplex DNA; and comparing the amount
CC of binding protein bound to the duplex DNA before and after the adding.
CC The method is useful in screening libraries of synthetic or biological
CC compounds for their ability to bind DNA test sequences. The method may
CC also be used in characterising the preferred binding sequences of any
CC selected DNA-binding molecule. This sequence represents a test sequence
CC corresponding to a promoter target of a human gene.
XX
SQ Sequence 50 BP; 16 A; 11 C; 10 G; 13 T; 0 U; 0 Other;

Query Match 1.5%; Score 50; DB 1; Length 50;
Best Local Similarity 100.0%; Pred. No. 3.8;
Matches 50; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 459 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 508
||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 CATTTCCTCAAAGACAGACAATAAATTGACTGGGGACGCAGTCTTGTACT 50

RESULT 9
AAZ55589/c
ID AAZ55589 standard; DNA; 42 BP.
XX
AC AAZ55589;
XX
DT 15-SEP-2003 (revised)
DT 14-MAR-2000 (first entry)
XX
DE Degenerate mammalian IL-5 antisense PCR primer 1, SEQ ID NO:135.
XX
KW Interleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 ligand; CD154;
KW interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline;
KW granulocyte macrophage colony-stimulating factor; inhibitor;
KW immune response; immunoregulation; tumour; cancer; autoimmune disease;
KW vaccine; PCR; primer; ss.
XX
OS Homo sapiens.
OS Felis catus.
OS Chimeric.
XX
PN WO9961618-A2.
XX
PD 02-DEC-1999.
XX
PF 28-MAY-1999; 99WO-US011942.
XX
PR 29-MAY-1998; 98US-0087306P.
XX
PA (HESK-) HESKA CORP.
XX
PI Sim G, Yang S, Dreitz MJ, Wonderling RS;
XX
DR WPI; 2000-072623/06.
XX
PT Nucleic acids encoding immunoregulatory proteins from cats or dogs,
PT useful for treating or preventing e.g. tumors or autoimmune disease.
XX
PS Example 5A; Page 106; 264pp; English.
XX
CC The invention relates to canine interleukin-4 (IL-4), canine or feline
CC Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40
CC ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha)
CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and
CC nucleotides which encode these immunoregulatory proteins. The proteins,
CC their associated nucleic acids, specific antibodies and inhibitors may be
CC used as vaccines for therapeutic or prophylactic regulation of an immune
CC response in animals (particularly cats, dogs, horses and humans). They
CC may be used to treat autoimmune or infectious diseases including

```
CC   allergies, tumours, inflammation and graft rejection, and to increase the
CC   response from a co-administered antigen. The nucleotide sequences can
CC   also be used for the recombinant production of a protein, while
CC   nucleotide fragments are useful as probes, as amplification primers and
CC   as sources of inhibitory therapeutics (e.g., antisense oligonucleotides).
CC   The proteins may be used to raise antibodies and to screen for modulators
CC   of activity, while the antibodies may be used in detection, and in drug
CC   targetting. Sequences AAZ55491-Z55498, AAZ55513-Z55515 and AAZ55581-
CC   Z55608 represent PCR primers used in isolation, amplification and cloning
CC   of cDNAs encoding the immunoregulatory proteins of the invention.
CC   (Updated on 15-SEP-2003 to standardise OS field)
XX
SQ   Sequence 42 BP; 15 A; 5 C; 7 G; 13 T; 0 U; 2 Other;

  Query Match             1.3%;  Score 41.2;  DB 1;  Length 42;
  Best Local Similarity   95.2%;  Pred. No. 12;
  Matches   40;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2390 ATATATTTCAGATATCAGAATCATTGAAGTATTTTCCTCCAG 2431
                ||||||||||||||||||||||:||||:||||||||||||
Db         42 ATATATTTCAGATATCAGAATCATYGAAGTMTTTTCCTCCAG 1


RESULT 10
AAQ57198
ID   AAQ57198 standard; mRNA; 34 BP.
XX
AC   AAQ57198;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Enzymatic RNA molecule IL-5 mRNA target sequence.
XX
KW   Interleukin-5; specific; cleavage; target RNA; protein; expression;
KW   inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention;
KW   psoriasis; asthma; inflammatory diseases; restenosis;
KW   cardiovascular condition; hypertension; arthritis; ss.
XX
OS   Synthetic.
XX
PN   WO9402595-A1.
XX
PD   03-FEB-1994.
XX
PF   02-JUL-1993;   93WO-US006316.
XX
PR   17-JUL-1992;   92US-00916763.
PR   07-DEC-1992;   92US-00987132.
PR   07-DEC-1992;   92US-00989848.
PR   07-DEC-1992;   92US-00989849.
PR   19-JAN-1993;   93US-00008895.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Sullivan SM,  Draper KG;
XX
DR   WPI; 1994-048853/06.
XX
PT   Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT   inflammatory, arthritic, stenotic or cardiovascular diseases or
PT   conditions.
XX
PS   Claim 3; Page 17; 65pp; English.
XX
CC   This is an IL-5 mRNA target sequence (nucleotide no. 370) of an enzymatic
CC   RNA molecule (ribozyme) which cleaves mRNA associated with the
CC   development or maintenance of a psoriatic or asthmatic condition. The
CC   concn. of the ribozyme necessary to effect a therapeutic treatment is
CC   lower than that of an antisense oligonucleotide and the specificity of
CC   action is higher. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 34 BP; 12 A; 9 C; 7 G; 6 T; 0 U; 0 Other;

  Query Match             1.1%;  Score 34;  DB 1;  Length 34;
  Best Local Similarity   100.0%;  Pred. No. 26;
  Matches   34;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2136 AGACGGAGAGTAAACCAATTCCTAGACTACCTGC 2169
                ||||||||||||||||||||||||||||||||||
Db          1 AGACGGAGAGTAAACCAATTCCTAGACTACCTGC 34


RESULT 11
AAT38975/c
ID   AAT38975 standard; DNA; 33 BP.
XX
AC   AAT38975;
XX
DT   29-MAY-1997  (first entry)
XX
DE   Interleukin IL-5 3' PCR primer.
XX
KW   Cytokine; expression profile; genital wart; interleukin 12; IL-12;
KW   tumour regression; adjuvant; polymerase chain reaction; PCR;
KW   condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18;
KW   anogenital; cutaneous; laryngeal; oesophageal; cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9629091-A1.
XX
PD   26-SEP-1996.
XX
PF   22-MAR-1996;   96WO-GB000686.
XX
PR   22-MAR-1995;   95GB-00005784.
XX
PA   (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.
XX
PI   Stanley MA,  Scarpini CG;
XX
DR   WPI; 1996-442947/44.
XX
PT   Use of interleukin-12 to treat papilloma virus-associated lesions - esp.
PT   as a vaccine adjuvant with papilloma virus antigen for immuno:therapy of
PT   warts or tumours.
XX
PS   Disclosure; Page 14; 32pp; English.
XX
CC   RNA was extracted from genital lesions, reverse transcribed to produce
CC   cDNA and then the cDNA was used as the template for PCR amplification of
CC   various cytokines using the primers in AAT38964- AAT39005. To confirm the
CC   identity of amplified cDNA, digoxigenin- labelled probes specific for
CC   each cytokine (see AAT39006-T39021) were hybridised with Southern blots
CC   of amplified sequences. The expression profile for regressing and non-
CC   regressing warts was established and compared to cytokine expression
CC   patterns in normal cervical tissue. Results showed that interleukin 12 is
CC   barely expressed (if at all) in non-regressing warts, but is expressed in
CC   regressing warts. This suggests a central role for IL-12 in wart
CC   regression. It has been found that IL-12 can be used (especially as a
CC   vaccine adjuvant) for treating papilloma virus-associated lesions such as
CC   condyloma acuminata (anogenital warts) caused by human papilloma virus
CC   type 6 (HPV-6) and/or HPV-11 and more generally for treatment of tumours
CC   associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,
CC   laryngeal and oesophageal cancers
XX
SQ   Sequence 33 BP; 7 A; 9 C; 3 G; 14 T; 0 U; 0 Other;

  Query Match             1.0%;  Score 33;  DB 1;  Length 33;
  Best Local Similarity   100.0%;  Pred. No. 30;
  Matches   33;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2184 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
                |||||||||||||||||||||||||||||||||
Db         33 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 1
```

RESULT 12
AAT47001/c
ID AAT47001 standard; DNA; 33 BP.
XX
AC AAT47001;
XX
DT 01-DEC-1997 (first entry)
XX
DE Interleukin-5 primer B.
XX
KW PCR; polymerase chain reaction; primer; amplify; beta-actin; IL-2; IL-4;
KW interferon-gamma; interleukin-2; peripheral blood mononuclear cell; IL-5;
KW granulocyte macrophage colony stimulating factor; GM-CSF; cytokine; PBMC;
KW CD8 cell; T-cell; cell mediated immunity; cytotoxic; CD45RA; IL-10; HIV;
KW surface marker; naive T-cell; thymus; proliferative response; antibody;
KW cognate antigen; immuno-compromised; cancer; viral infection;
KW autoimmune disease; ss.
XX
OS Synthetic.
XX
PN WO9712244-A1.
XX
PD 03-APR-1997.
XX
PF 26-SEP-1996; 96WO-US015460.
XX
PR 27-SEP-1995; 95US-0004364P.
XX
PA (STRD) UNIV LELAND STANFORD JUNIOR.
XX
PI Roederer M, Rabin R, Herzenberg LA, Herzenberg LA;
XX
DR WPI; 1997-213057/19.
XX
PT Detection of naive T cells in subjects - useful to identify production
PT stimulating drugs for immunocompromised subject treatment.
XX
PS Disclosure; Page 23; 56pp; English.
XX
CC AAT46992-T47005 represent amplification primers for DNA encoding
CC cytokines from CD8 T-cells. This sequence and AAT47000 are primers for
CC the interleukin-5 gene. CD8 cells provide cell mediated immunity through
CC both cytotoxic and suppressor mechanisms. The naive subset of CD8 cells
CC expresses the CD45RA surface marker, and make a relatively poor cytokine
CC response after T-cell receptor stimulation. Naive T-cells are cells which
CC have recently emigrated from the thymus and have a predominantly
CC proliferative response when exposed to cognate antigens for the first
CC time. These primers can be used in the method of the invention. The
CC method of the invention is for evaluating the efficacy of a drug to
CC stimulate the production of naive T-cells. The method comprises obtaining
CC a sample containing peripheral blood mononuclear cells from a subject. A
CC suitable dose of a drug is then administered before a second sample is
CC obtained. The T-cell populations are then isolated from the samples. The
CC number of naive T-cells in each population is then determined by
CC detecting T-cell immunoreactivity with at least 2 antibodies, selectively
CC reactive with naive T-cell surface proteins. If the number of naive T-
CC cells in the second population is significantly greater than the number
CC in the first, then the drug is identified as being effective. The method
CC can be used to identify naive T-cell count elevating drugs, particularly
CC in immuno-compromised subjects, e.g. HIV positive subjects, cancer
CC patients or individuals with viral infection or autoimmune disease
XX
SQ Sequence 33 BP; 7 A; 9 C; 3 G; 14 T; 0 U; 0 Other;

Query Match 1.0%; Score 33; DB 1; Length 33;
Best Local Similarity 100.0%; Pred. No. 30;
Matches 33; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2184 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 2216
||||||||||||||||||||||||||||||||||
Db 33 GTAATGAACACCGAGTGGATAATAGAAAGTTGA 1

RESULT 13
AAT76227/c
ID AAT76227 standard; DNA; 32 BP.
XX
AC AAT76227;
XX
DT 12-SEP-1997 (first entry)
XX
DE Human IL5 antisense oligonucleotide HUMIL5AS8.
XX
KW Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS Synthetic.
XX
PN WO9640162-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US009306.
XX
PR 07-JUN-1995; 95US-00474497.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW, Metzger WJ;
XX
DR WPI; 1997-051871/05.
XX
PT Treatment of airway diseases such as asthma - by topically applying
PT adenosine-free antisense oligo:nucleotide to airway epithelium of
PT subject.
XX
PS Claim 5; Page 31; 71pp; English.
XX
CC A method for treating airway disease in a subject has been produced,
CC which involves the topical administration of an essentially adenosine
CC free antisense oligonucleotide (ON) to the airway epithelium of the
CC subject. The present sequence is an antisense oligonucleotide HUMIL5AS8
CC specific for the human IL5. The method can be used to treat airway
CC diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC disease, bronchitis and other airway diseases characterised by an
CC inflammatory response. By eliminating adenosine from the antisense ON,
CC its liberation upon antisense degradation is prevented, thereby
CC preventing adenosine-induced bronchoconstriction in patients with hyper-
CC reactive airways
XX
SQ Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;

Query Match 1.0%; Score 32; DB 1; Length 32;
Best Local Similarity 100.0%; Pred. No. 33;
Matches 32; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3123 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 3154
||||||||||||||||||||||||||||||||
Db 32 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 1

RESULT 14
AAX54023/c
ID AAX54023 standard; DNA; 32 BP.
XX
AC AAX54023;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human IL-5 antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;

```
KW   acute asthma; allergy; asthma; impeded respiration;
KW   respiratory distress syndrome; pain; cystic fibrosis;
KW   pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW   chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW   colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW   hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW   prostate cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9913886-A1.
XX
PD   25-MAR-1999.
XX
PF   17-SEP-1998;   98WO-US019419.
XX
PR   17-SEP-1997;   97US-0059160P.
PR   09-JUN-1998;   98US-00093972.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 1999-229400/19.
XX
PT   New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT   vasoconstriction.
XX
PS   Disclosure; Page 49; 120pp; English.
XX
CC   The specification describes antisense oligonucleotides (AAX52869-X55271)
CC   directed against at least 2 mRNAs selected from target genes, coding and
CC   non-coding regions of RNAs corresponding to target genes, gene initiation
CC   codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC   -end and the juxta-section between coding and non-coding regions and all
CC   segments of RNAs encoding proteins associated with one or more diseases,
CC   conditions or mixtures. The antisense oligonucleotides may be derived
CC   from sequences AAX55272-74. These multiple target oligonucleotides
CC   (specifically AAX55180-271) can be used for the antisense treatment of
CC   diseases and conditions. Typical diseases and conditions are those
CC   associated with impaired respiration and inflammation, including lung
CC   diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC   acute asthma, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC   pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC   disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC   colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC   hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC   well as all types of cancers which may metastasize or have metastasized
CC   to the lungs, including breast and prostate cancer
XX
SQ   Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;

  Query Match             1.0%;  Score 32;  DB 1;  Length 32;
  Best Local Similarity   100.0%;  Pred. No. 33;
  Matches   32;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3123 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 3154
              ||||||||||||||||||||||||||||||||
Db         32 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 1


RESULT 15
AAA33467/c
ID   AAA33467 standard; DNA; 32 BP.
XX
AC   AAA33467;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1156.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Claim 18; Page 409; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;

  Query Match             1.0%;  Score 32;  DB 1;  Length 32;
  Best Local Similarity   100.0%;  Pred. No. 33;
  Matches   32;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3123 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 3154
              ||||||||||||||||||||||||||||||||
Db         32 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 1


RESULT 16
AAF19589/c
ID   AAF19589 standard; DNA; 32 BP.
XX
AC   AAF19589;
```

```
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human IL5 polynucleotide fragment #1156.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
XX
PR   06-APR-1999;   99US-0127958P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not trigger
PT   adenosine receptors during metabolism, useful e.g. for treating cancers
PT   and respiratory obstructions.
XX
PS   Claim 14; Page 208; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC   surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention
XX
SQ   Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;

  Query Match             1.0%;  Score 32;  DB 1;  Length 32;
  Best Local Similarity   100.0%;  Pred. No. 33;
  Matches   32;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3123 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 3154
              ||||||||||||||||||||||||||||||||
Db         32 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 1


RESULT 17
ABZ95283/c
ID   ABZ95283 standard; DNA; 32 BP.
XX
AC   ABZ95283;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human IL-5 antisense fragment no.1147.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 10525; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;

  Query Match             1.0%;  Score 32;  DB 1;  Length 32;
  Best Local Similarity   100.0%;  Pred. No. 33;
```

```
  Matches   32;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3123 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 3154
              ||||||||||||||||||||||||||||||||
Db         32 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 1


RESULT 18
ABD19257/c
ID   ABD19257 standard; DNA; 32 BP.
XX
AC   ABD19257;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human IL5 DNA fragment 1147.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 10525; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 32 BP; 0 A; 11 C; 13 G; 8 T; 0 U; 0 Other;

  Query Match             1.0%;  Score 32;  DB 1;  Length 32;
  Best Local Similarity   100.0%;  Pred. No. 33;
  Matches   32;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3123 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 3154
              ||||||||||||||||||||||||||||||||
Db         32 CCCGGGGCAGGGCAGCACCAGGCCGCACAACA 1


RESULT 19
ABN89420
ID   ABN89420 standard; DNA; 30 BP.
XX
AC   ABN89420;
XX
DT   30-AUG-2002  (first entry)
XX
DE   Human IL5h related PCR primer Hf SEQ ID NO:5.
XX
KW   Concentrating gene; industrial enzyme screening; pharmaceutical;
KW   agrochemical; identification; parasitic; infectious; microorganism;
KW   disease diagnosis; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200250268-A1.
XX
PD   27-JUN-2002.
XX
PF   18-DEC-2001; 2001WO-JP011113.
XX
PR   19-DEC-2000; 2000JP-00386025.
XX
PA   (SUNR ) SUNTORY LTD.
PA   (SUNT-) SUNTORY BIOMEDICAL RES LTD.
XX
PI   Nakazato H;
XX
DR   WPI; 2002-508798/54.
XX
PT   Method for concentrating trace genes expressed even in presence of large
PT   amounts of (un)known genes, useful in screening industrial enzymes, and
PT   pharmaceutical and agrochemical leads from nature.
XX
PS   Example 1; Page 33; 62pp; Japanese.
XX
CC   The present invention describes a method for concentrating a gene in a
CC   trace amount from a DNA sample containing the gene by separating it from
CC   a gene in a large quantity comprises dividing the sample into driver and
CC   target DNA fractions, mixing and forming single-stranded DNAs from them,
CC   hybridisation to produce a double-stranded DNA, and repeating the steps.
CC   The method can be used for concentrating a trace amount of an expressed
CC   gene even from large amounts of a (un)known gene, which is useful in
CC   screening industrial enzymes, pharmaceutical and agrochemical leads from
CC   nature e.g. soil, river and lake water, as well as antibiotics, and
CC   identifying parasitic and infectious microorganisms for disease
CC   diagnosis. The present sequence represents a PCR primer which is used in
CC   an example from the present invention
XX
SQ   Sequence 30 BP; 9 A; 2 C; 4 G; 15 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 30;  DB 1;  Length 30;
  Best Local Similarity   100.0%;  Pred. No. 41;
```

```
  Matches   30;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1600 ACTTTTTGAAAATTTTATCTTAATATGTGG 1629
              ||||||||||||||||||||||||||||||
Db          1 ACTTTTTGAAAATTTTATCTTAATATGTGG 30


RESULT 20
AAQ86377/c
ID   AAQ86377 standard; DNA; 29 BP.
XX
AC   AAQ86377;
XX
DT   25-MAR-2003  (revised)
DT   05-DEC-1995  (first entry)
XX
DE   Interleukin-5 detection PCR primer #2 in BCTD-huBM mice.
XX
KW   Primer; PCR; amplification; human; cytokine gene expression; HIV; mouse;
KW   B-cell; T-cell; thymus; liver; tissue implant; immunity; monocyte; model;
KW   peripheral lymphoid compartment; pathogenesis; beta-2 microglobulin;
KW   peripheral blood mononuclear cell; spleen; lymph node; interleukin;
KW   tumour necrosis factor; leukemia inhibitory factor; granulocyte;
KW   macrophage; colony stimulating factor; bone marrow; ss.
XX
OS   Synthetic.
XX
PN   WO9509235-A1.
XX
PD   06-APR-1995.
XX
PF   28-SEP-1994;   94WO-US010957.
XX
PR   28-SEP-1993;   93US-00127880.
PR   02-JUN-1994;   94US-00252773.
XX
PA   (YESH ) UNIV YESHIVA EINSTEIN COLLEGE.
XX
PI   Goldstein H,  Kollmann TR;
XX
DR   WPI; 1995-154956/20.
XX
PT   B-cell, T-cell deficient (BTCD) chimeric mice - useful as model for
PT   assaying pathogenesis of human disease e.g. HIV-1, and efficacy and
PT   toxicity.
XX
PS   Example 8; Page 57; 86pp; English.
XX
CC   Primers AAQ86362-83 and AAQ87677-82 were used to detect the expression of
CC   various cytokines genes in HIV infected B-cell, T-cell deficient (BCTD)
CC   mice which have been transformed with human thymus, liver tissue and bone
CC   marrow implants (BCTD-huBM mice). These mice are immune-deficient for
CC   murine B- and T-cells but can express human immunity cells such as T-
CC   cells and monocytes in their peripheral lymphoid compartments. These mice
CC   are useful as models for the pathogenesis of human disease, e.g. for
CC   assaying the dissemination of HIV. The primers are used to assay the
CC   effect of HIV on cytokine gene expression e.g. as a model for human
CC   patients with HIV. The primers AAQ86376-7 are used to detect the
CC   expression of the interleukin-5 gene, using cDNA derived from mRNA
CC   extracted from the long bones of BCTD-HuBM mice. (Updated on 25-MAR-2003
CC   to correct PN field.)
XX
SQ   Sequence 29 BP; 6 A; 4 C; 8 G; 11 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 29;  DB 1;  Length 29;
  Best Local Similarity   100.0%;  Pred. No. 46;
  Matches   29;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2144 AGTAAACCAATTCCTAGACTACCTGCAAG 2172
              |||||||||||||||||||||||||||||
Db         29 AGTAAACCAATTCCTAGACTACCTGCAAG 1


RESULT 21
ABX75428/c
ID   ABX75428 standard; DNA; 29 BP.
XX
AC   ABX75428;
XX
DT   25-MAR-2003  (first entry)
XX
DE   Human interleukin 5 reverse RT-PCR primer.
XX
KW   CNS; conserved non-coding region; ss; cytokine; interleukin 4; IL-4;
KW   interleukin 5; IL-5; interleukin 13; IL-13; chromosome 5q31; LCR;
KW   locus control region; interleukin gene cluster; transcription factor;
KW   transgenic; PCR; primer; RT-PCR; reverse transcriptase PCR; human.
XX
OS   Homo sapiens.
XX
PN   US2002132290-A1.
XX
PD   19-SEP-2002.
XX
PF   20-FEB-2001; 2001US-00789529.
XX
PR   18-FEB-2000; 2000US-0183657P.
XX
PA   (FRAZ/) FRAZER K A.
PA   (RUBI/) RUBIN E M.
PA   (LOOT/) LOOTS G G.
XX
PI   Frazer KA,  Rubin EM,  Loots GG;
XX
DR   WPI; 2003-165733/16.
XX
PT   Novel isolated nucleic acids which are locus control region elements in
PT   interleukin gene cluster region of chromosome, referred as conserved non-
PT   coding sequences, useful for modulating expression of cytokine genes.
XX
PS   Example 4; Page 23; 48pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule comprising a
CC   length of about 100 nucleotides of less, which has a sequence at least
CC   about 70% identical to the human conserved non-coding sequence (CNS)-1
CC   sequence (a locus control region (LCR) element in interleukin gene
CC   cluster region of chromosome 5q31 containing interleukin (IL) 4, IL5 and
CC   IL 13). Optionally, the nucleic acid has 70% identity to a human CNS-2 to
CC   CNS-16 or mouse CNS-1 to CNS-16 or their complements. Also included are:
CC   (1) an expression cassette comprising a CNS-1 sequence operably linked to
CC   a promoter which controls transcription of a heterologous coding sequence
CC   ; (2) an expression cassette consisting essentially of an IL-4 gene, an
CC   IL-13 gene and a CNS-1 sequence; (3) an expression cassette comprising an
CC   IL-4 gene, an IL-13 gene, and a CNS-1 sequence flanked between two
CC   recombination site sequences; (4) an expression cassette comprising an IL
CC   -4 gene and an IL-13 gene and lacking a CNS-1 sequence; (5) a T cell
CC   comprising one of the expression cassettes; (6) a non-human transgenic
CC   animal comprising one of the expression cassettes or the T-cell; and (7)
CC   a non-human transgenic animal where a CNS-1 sequence is deleted from its
CC   chromosome. The T cell is useful for identifying a compound that
CC   modulates binding of a transcription factor to a CNS-1 sequence which
CC   involves contacting the compound with the T cell and determining the
CC   functional effect of the compound on binding of the transcription factor
CC   to the CNS-1 sequence. The compound is an antisense sequence of the CNS
CC   sequence, an antibody against the transcription factor, or a small
CC   compound. The nucleic acid is useful for modulating expression of 1 or
CC   more cytokine genes and has a diagnostic tool to screen patients having
CC   disease related to cytokine gene expression. The expression cassette is
CC   useful for identifying compounds that modulate functions of CNS sequence
CC   is on cytokine gene expression. Expression cassettes with and without CNS
CC   -1 are useful for making two lines of non-human transgenic animals that
CC   are identical except one line has the CNS-1 sequence and the other line
CC   lacks the CNS-1 sequence. The transgenic animals are useful as in vivo
CC   models for various therapeutic modalities. The present sequence is a
CC   reverse transcriptase (RT)-PCR primer used to monitor the effects of CNS-
CC   1 on cytokine expression in a transgenic mouse strain which has the gene
```

```
CC   cluster from chromosome 5q31 with and without CNS-1
XX
SQ   Sequence 29 BP; 8 A; 6 C; 4 G; 11 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 29;  DB 1;  Length 29;
  Best Local Similarity   100.0%;  Pred. No. 46;
  Matches   29;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1950 GTACTGTGGAAAGACTATTCAAAAACTTG 1978
              |||||||||||||||||||||||||||||
Db         29 GTACTGTGGAAAGACTATTCAAAAACTTG 1


RESULT 22
AAF74303
ID   AAF74303 standard; DNA; 28 BP.
XX
AC   AAF74303;
XX
DT   04-MAY-2001  (first entry)
XX
DE   Canine interleukin-5 coding sequence PCR primer #3.
XX
KW   Dog; interleukin-5; IL-5; allergy; cancer; gene therapy;
KW   inflammatory reaction; PCR primer; ss.
XX
OS   Mus sp.
OS   Homo sapiens.
XX
PN   WO200111049-A2.
XX
PD   15-FEB-2001.
XX
PF   09-AUG-2000; 2000WO-US021651.
XX
PR   10-AUG-1999;   99US-00371615.
XX
PA   (IDEX-) IDEXX LAB INC.
XX
PI   Guo H,  Lawton R,  Mermer B,  Aiyappa AP;
XX
DR   WPI; 2001-191542/19.
XX
PT   Novel canine interleukin 5 polynucleotide and polypeptides are used for
PT   generating antibodies which are useful in treating allergies in dogs.
XX
PS   Disclosure; Page 47; 48pp; English.
XX
CC   The present invention provides the protein and coding sequences of the
CC   canine interleukin-5 (IL-5) protein. This can be used to treat allergies,
CC   cancer and inflammatory reactions in dogs. The present sequence is a PCR
CC   primer used to obtain the sequences of the invention
XX
SQ   Sequence 28 BP; 7 A; 5 C; 3 G; 13 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 51;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        440 CTGATTGTTAGAAATTATTCATTTCCTC 467
              ||||||||||||||||||||||||||||
Db          1 CTGATTGTTAGAAATTATTCATTTCCTC 28


RESULT 23
ABK65968/c
ID   ABK65968 standard; DNA; 28 BP.
XX
AC   ABK65968;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human gene specific PCR primer #56.
XX
KW   Primer; ss; DNA microarray; differential expression analysis; human.
XX
OS   Homo sapiens.
XX
PN   US6352829-B1.
XX
PD   05-MAR-2002.
XX
PF   05-JAN-1999;   99US-00225928.
XX
PR   21-MAY-1997;   97US-00859998.
XX
PA   (CLON-) CLONTECH LAB INC.
XX
PI   Chenchik A,  Jokhadze G,  Bibilashvilli R;
XX
DR   WPI; 2002-314699/35.
XX
PT   Producing sub-population of labeled nucleic acids, useful for analyzing
PT   differences in RNA profiles between several different physiological
PT   sources, using set of distinct gene specific primers.
XX
PS   Example 3; SEQ ID NO 56; 11pp; English.
XX
CC   The invention relates to producing a sub-population of labeled nucleic
CC   acids (NAs) comprising contacting a NA sample from a physiological
CC   source, with a pool of 50 distinct gene specific primers under suitable
CC   conditions to enzymatically generate sub-population of NAs, where each
CC   gene specific primer has a sequence complementary to a distinct mRNA, and
CC   each labeled NA is generated using a single gene specific primer. The
CC   method is useful for producing a sub-population of labeled NAs which is
CC   useful for analysing the differences in the RNA profiles between several
CC   different physiological sources, where the method comprises producing
CC   subpopulation of labeled NAs for the different physiological sources,
CC   comprising the populations for each physiological source to identify
CC   differences in the population, where the comparison is preferably
CC   performed by hybridising the labeled NAs for each of the distinct
CC   physiological sources to an array of probe NAs stably associated with the
CC   surface of a substrate to produce a hybridisation pattern for each of the
CC   sources, and comparing the patterns for each of the sources, where
CC   differential gene expression assays are utilised in differential
CC   expression analysis of diseased a normal tissue e.g. neoplastic a normal
CC   tissue, or different tissue or subtissue types. The present sequence is a
CC   human gene specific PCR primer used in the method of the invention. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from USPTO
CC   at http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
XX
SQ   Sequence 28 BP; 4 A; 9 C; 5 G; 10 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 51;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1912 GGGAATAGGCACACTGGAGAGTCAAACT 1939
              ||||||||||||||||||||||||||||
Db         28 GGGAATAGGCACACTGGAGAGTCAAACT 1


RESULT 24
ABK14340/c
ID   ABK14340 standard; DNA; 28 BP.
XX
AC   ABK14340;
XX
DT   23-APR-2002  (first entry)
XX
DE   Human interleukin-5 antisense PCR primer.
XX
KW   Human; ss; PCR; primer; interleukin-5; neuroprotective; nootropic;
KW   anticonvulsant; cerebroprotective; antiparkinsonian; vulnerary;
KW   immunosuppressive; microglia cell line; autoimmune disease;
```

```
KW   neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW   Huntington's disease; amyotrophic lateral sclerosis; stroke;
KW   spinal cord injury; ataxia; brain trauma; multiple sclerosis;
KW   acquired immunodeficiency syndrome; AIDS-dementia.
XX
OS   Homo sapiens.
XX
PN   WO200204604-A2.
XX
PD   17-JAN-2002.
XX
PF   09-JUL-2001; 2001WO-IB001770.
XX
PR   10-JUL-2000; 2000WO-US018777.
PR   15-MAY-2001; 2001US-00855468.
PR   22-JUN-2001; 2001US-00887145.
XX
PA   (UYBR-) UNIV BRITISH COLUMBIA.
XX
PI   Kim SU;
XX
DR   WPI; 2002-148175/19.
XX
PT   Genetically modified human microglia cell for treating neurodegenerative
PT   disease, comprises demonstrable phagocytic properties, produces progeny
PT   in culture, presents surface antigens, and contains modified human
PT   genomic DNA.
XX
PS   Example; Page 22; 46pp; English.
XX
CC   The invention relates to a genetically modified human microglia cell
CC   maintained stably in vitro which has (i) has demonstrable phagocytic
CC   properties; (ii) produces progeny continuously in culture; (iii) presents
CC   CD11b and CD68 as surface antigens; and (iv) contains human genomic DNA
CC   that has been genetically modified to include a viral vector carrying at
CC   least one DNA segment encoding an exogenous gene for intracellular
CC   expression. The microglia cell line is useful for screening compounds for
CC   the treatment of autoimmune disease, and is used in the treatment of a
CC   neurodegenerative disorder e.g. Alzheimer's disease, Parkinson's disease,
CC   Huntington's disease, amyotrophic lateral sclerosis, stroke, spinal cord
CC   injuries, ataxia, brain trauma, multiple sclerosis and AIDS-(acquired
CC   immunodeficiency syndrome)-dementia. The cell line is also useful for
CC   isolating neurotoxic or neurotrophic molecules naturally produced by
CC   human microglia. The present sequence is an RT-PCR (reverse transcriptase
CC   PCR) primer which amplifies a segment of the mRNA for an expressed marker
CC   gene, used to characterise the cell line
XX
SQ   Sequence 28 BP; 9 A; 3 C; 5 G; 11 T; 0 U; 0 Other;

  Query Match             0.9%;  Score 28;  DB 1;  Length 28;
  Best Local Similarity   100.0%;  Pred. No. 51;
  Matches   28;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1975 CTTGTCCTTAATAAAGAAATACATTGAC 2002
             ||||||||||||||||||||||||||||
Db         28 CTTGTCCTTAATAAAGAAATACATTGAC 1


RESULT 25
AAQ57191
ID   AAQ57191 standard; mRNA; 27 BP.
XX
AC   AAQ57191;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Enzymatic RNA molecule IL-5 mRNA target sequence.
XX
KW   Interleukin-5; specific; cleavage; target RNA; protein; expression;
KW   inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention;
KW   psoriasis; asthma; inflammatory diseases; restenosis;
KW   cardiovascular condition; hypertension; arthritis; ss.
XX
OS   Synthetic.
XX
PN   WO9402595-A1.
XX
PD   03-FEB-1994.
XX
PF   02-JUL-1993;   93WO-US006316.
XX
PR   17-JUL-1992;   92US-00916763.
PR   07-DEC-1992;   92US-00987132.
PR   07-DEC-1992;   92US-00989848.
PR   07-DEC-1992;   92US-00989849.
PR   19-JAN-1993;   93US-00008895.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Sullivan SM,  Draper KG;
XX
DR   WPI; 1994-048853/06.
XX
PT   Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT   inflammatory, arthritic, stenotic or cardiovascular diseases or
PT   conditions.
XX
PS   Claim 3; Page 17; 65pp; English.
XX
CC   This is an IL-5 mRNA target sequence (nucleotide no. 61) of an enzymatic
CC   RNA molecule (ribozyme) which cleaves mRNA associated with the
CC   development or maintenance of a psoriatic or asthmatic condition. The
CC   concn. of the ribozyme necessary to effect a therapeutic treatment is
CC   lower than that of an antisense oligonucleotide and the specificity of
CC   action is higher. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 27 BP; 4 A; 4 C; 8 G; 11 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        569 ATTTGAGTTTGCTAGCTCTTGGAGCTG 595
              |||||||||||||||||||||||||||
Db          1 ATTTGAGTTTGCTAGCTCTTGGAGCTG 27


RESULT 26
ABN89421/c
ID   ABN89421 standard; DNA; 27 BP.
XX
AC   ABN89421;
XX
DT   30-AUG-2002  (first entry)
XX
DE   Human IL5h related PCR primer Hr SEQ ID NO:6.
XX
KW   Concentrating gene; industrial enzyme screening; pharmaceutical;
KW   agrochemical; identification; parasitic; infectious; microorganism;
KW   disease diagnosis; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200250268-A1.
XX
PD   27-JUN-2002.
XX
PF   18-DEC-2001; 2001WO-JP011113.
XX
PR   19-DEC-2000; 2000JP-00386025.
XX
PA   (SUNR ) SUNTORY LTD.
PA   (SUNT-) SUNTORY BIOMEDICAL RES LTD.
XX
PI   Nakazato H;
```

```
XX
DR   WPI; 2002-508798/54.
XX
PT   Method for concentrating trace genes expressed even in presence of large
PT   amounts of (un)known genes, useful in screening industrial enzymes, and
PT   pharmaceutical and agrochemical leads from nature.
XX
PS   Example 1; Page 33; 62pp; Japanese.
XX
CC   The present invention describes a method for concentrating a gene in a
CC   trace amount from a DNA sample containing the gene by separating it from
CC   a gene in a large quantity comprises dividing the sample into driver and
CC   target DNA fractions, mixing and forming single-stranded DNAs from them,
CC   hybridisation to produce a double-stranded DNA, and repeating the steps.
CC   The method can be used for concentrating a trace amount of an expressed
CC   gene even from large amounts of a (un)known gene, which is useful in
CC   screening industrial enzymes, pharmaceutical and agrochemical leads from
CC   nature e.g. soil, river and lake water, as well as antibiotics, and
CC   identifying parasitic and infectious microorganisms for disease
CC   diagnosis. The present sequence represents a PCR primer which is used in
CC   an example from the present invention
XX
SQ   Sequence 27 BP; 6 A; 4 C; 5 G; 12 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1981 CTTAATAAAGAAATACATTGACGGCCA 2007
             |||||||||||||||||||||||||||
Db         27 CTTAATAAAGAAATACATTGACGGCCA 1


RESULT 27
ACF04471
ID   ACF04471 standard; DNA; 27 BP.
XX
AC   ACF04471;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Real time PCR targeting IL-5 probe P104.
XX
KW   Nucleic acid level determination; PCR; primer; probe; DNA quantification;
KW   gene therapy; immunosuppressive; anti-HIV; antiarthritic;
KW   neuroprotective; cytostatic; antiallergic; ss.
XX
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1
FT                    /*tag=  a
FT                    /mod_base= OTHER
FT                    /note= "modified by 6FAM"
FT   modified_base    27
FT                    /*tag=  b
FT                    /mod_base= OTHER
FT                    /note= "modified by TAMRA-p"
XX
PN   WO2003060119-A2.
XX
PD   24-JUL-2003.
XX
PF   20-JAN-2003; 2003WO-EP000493.
XX
PR   18-JAN-2002; 2002EP-00447009.
XX
PA   (ULBR ) UNIV LIBRE BRUXELLES.
XX
PI   Stordeur P,  Goldman M;
XX
DR   WPI; 2003-598531/56.
XX
PT   Quantifying in vivo RNA from a biological sample for producing a
PT   medicament for treating immune related disease by determining in vivo
PT   levels of transcripts using nucleic acid/reverse transcription-PCR
PT   reagent mix in an automated setup.
XX
PS   Disclosure; Page 42; 83pp; English.
XX
CC   The present invention relates to a method of quantifying in vivo RNA from
CC   a biological sample. This involves collecting the biological sample in a
CC   tube comprising a compound inhibiting RNA degradation and/or gene
CC   induction, forming a precipitate comprising nucleic acids, separating the
CC   precipitate from the supernatant, dissolving the precipitate using a
CC   buffer, forming a suspension, isolating nucleic acids from the suspension
CC   using an automated device, dispersing or distributing a reagent mix for
CC   reverse transcription (RT)-PCR using an automated device, dispersing or
CC   distributing the nucleic acids isolated within the dispersed reagent mix
CC   using an automated device and determining the in vivo levels of
CC   transcripts using the nucleic acid and RT-PCR reagent mix of the previous
CC   step in an automated setup. The method is useful for monitoring or
CC   detecting changes in in vivo nucleic acids levels in a biological agent
CC   present, such as eukaryotic or prokaryotic cells, viruses or phages in a
CC   biological sample or for producing a medicament for treating immune
CC   related disease, e.g., autoimmunity, rheumatoid arthritis, multiple
CC   sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft
CC   rejection or Graft versus Host Disease. The present sequence is a PCR
CC   primer/probe used in the exemplification of the invention
XX
SQ   Sequence 27 BP; 9 A; 10 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 27;  DB 1;  Length 27;
  Best Local Similarity   100.0%;  Pred. No. 56;
  Matches   27;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        612 CCCCACAGAAATTCCCACAAGTGCATT 638
              |||||||||||||||||||||||||||
Db          1 CCCCACAGAAATTCCCACAAGTGCATT 27


RESULT 28
ABK65967
ID   ABK65967 standard; DNA; 26 BP.
XX
AC   ABK65967;
XX
DT   02-JUL-2002  (first entry)
XX
DE   Human gene specific PCR primer #55.
XX
KW   Primer; ss; DNA microarray; differential expression analysis; human.
XX
OS   Homo sapiens.
XX
PN   US6352829-B1.
XX
PD   05-MAR-2002.
XX
PF   05-JAN-1999;   99US-00225928.
XX
PR   21-MAY-1997;   97US-00859998.
XX
PA   (CLON-) CLONTECH LAB INC.
XX
PI   Chenchik A,  Jokhadze G,  Bibilashvilli R;
XX
DR   WPI; 2002-314699/35.
XX
PT   Producing sub-population of labeled nucleic acids, useful for analyzing
PT   differences in RNA profiles between several different physiological
PT   sources, using set of distinct gene specific primers.
XX
PS   Example 3; SEQ ID NO 55; 11pp; English.
XX
CC   The invention relates to producing a sub-population of labeled nucleic
```

CC acids (NAs) comprising contacting a NA sample from a physiological
CC source, with a pool of 50 distinct gene specific primers under suitable
CC conditions to enzymatically generate sub-population of NAs, where each
CC gene specific primer has a sequence complementary to a distinct mRNA, and
CC each labeled NA is generated using a single gene specific primer. The
CC method is useful for producing a sub-population of labeled NAs which is
CC useful for analysing the differences in the RNA profiles between several
CC different physiological sources, where the method comprises producing
CC subpopulation of labeled NAs for the different physiological sources,
CC comprising the populations for each physiological source to identify
CC differences in the population, where the comparison is preferably
CC performed by hybridising the labeled NAs for each of the distinct
CC physiological sources to an array of probe NAs stably associated with the
CC surface of a substrate to produce a hybridisation pattern for each of the
CC sources, and comparing the patterns for each of the sources, where
CC differential gene expression assays are utilised in differential
CC expression analysis of diseased a normal tissue e.g. neoplastic a normal
CC tissue, or different tissue or subtissue types. The present sequence is a
CC human gene specific PCR primer used in the method of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from USPTO
CC at http.wipo.seqdata.uspto.gov/sequence.html?DocID=6352829B1
XX
SQ Sequence 26 BP; 5 A; 6 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.8%; Score 26; DB 1; Length 26;
Best Local Similarity 100.0%; Pred. No. 62;
Matches 26; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 543 TTTCAGAGCCATGAGGATGCTTCTGC 568
||||||||||||||||||||||||||
Db 1 TTTCAGAGCCATGAGGATGCTTCTGC 26

RESULT 29
AAZ55590/c
ID AAZ55590 standard; DNA; 27 BP.
XX
AC AAZ55590;
XX
DT 15-SEP-2003 (revised)
DT 14-MAR-2000 (first entry)
XX
DE Degenerate mammalian IL-5 antisense PCR primer 2, SEQ ID NO:136.
XX
KW Interleukin; IL-4; IL-5; IL-13; Flt-3 ligand; CD40; CD40 ligand; CD154;
KW interferon-alpha; IFN-alpha; GMCSF; antibody; canine; feline;
KW granulocyte macrophage colony-stimulating factor; inhibitor;
KW immune response; immunoregulation; tumour; cancer; autoimmune disease;
KW vaccine; PCR; primer; ss.
XX
OS Homo sapiens.
OS Felis catus.
OS Chimeric.
XX
PN WO9961618-A2.
XX
PD 02-DEC-1999.
XX
PF 28-MAY-1999; 99WO-US011942.
XX
PR 29-MAY-1998; 98US-0087306P.
XX
PA (HESK-) HESKA CORP.
XX
PI Sim G, Yang S, Dreitz MJ, Wonderling RS;
XX
DR WPI; 2000-072623/06.
XX
PT Nucleic acids encoding immunoregulatory proteins from cats or dogs,
PT useful for treating or preventing e.g. tumors or autoimmune disease.
XX
PS Example 5A; Page 106; 264pp; English.
XX
CC The invention relates to canine interleukin-4 (IL-4), canine or feline
CC Flt-3 ligand, canine or feline CD40, canine or feline CD154 (CD40
CC ligand), canine IL-5, canine IL-13, feline interferon-alpha (IFN-alpha)
CC and feline granulocyte macrophage colony-stimulating factor (GMCSF), and
CC nucleotides which encode these immunoregulatory proteins. The proteins,
CC their associated nucleic acids, specific antibodies and inhibitors may be
CC used as vaccines for therapeutic or prophylactic regulation of an immune
CC response in animals (particularly cats, dogs, horses and humans). They
CC may be used to treat autoimmune or infectious diseases including
CC allergies, tumours, inflammation and graft rejection, and to increase the
CC response from a co-administered antigen. The nucleotide sequences can
CC also be used for the recombinant production of a protein, while
CC nucleotide fragments are useful as probes, as amplification primers and
CC as sources of inhibitory therapeutics (e.g., antisense oligonucleotides).
CC The proteins may be used to raise antibodies and to screen for modulators
CC of activity, while the antibodies may be used in detection, and in drug
CC targetting. Sequences AAZ55491-Z55498, AAZ55513-Z55515 and AAZ55581-
CC Z55608 represent PCR primers used in isolation, amplification and cloning
CC of cDNAs encoding the immunoregulatory proteins of the invention.
CC (Updated on 15-SEP-2003 to standardise OS field)
XX
SQ Sequence 27 BP; 3 A; 8 C; 3 G; 9 T; 0 U; 4 Other;

Query Match 0.8%; Score 25.4; DB 1; Length 27;
Best Local Similarity 85.2%; Pred. No. 70;
Matches 23; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 2274 TGAGAATGAGGGCCAAGAAAGAGTCAG 2300
||||||||||:||||::|||:|||||
Db 27 TGAGAATGAGGSCCAASMAAGRGTCAG 1

RESULT 30
AAT76224/c
ID AAT76224 standard; DNA; 25 BP.
XX
AC AAT76224;
XX
DT 12-SEP-1997 (first entry)
XX
DE Human IL5 antisense oligonucleotide HUMIL5AS5.
XX
KW Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS Synthetic.
XX
PN WO9640162-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US009306.
XX
PR 07-JUN-1995; 95US-00474497.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW, Metzger WJ;
XX
DR WPI; 1997-051871/05.
XX
PT Treatment of airway diseases such as asthma - by topically applying
PT adenosine-free antisense oligo:nucleotide to airway epithelium of
PT subject.
XX
PS Claim 5; Page 31; 71pp; English.
XX
CC A method for treating airway disease in a subject has been produced,
CC which involves the topical administration of an essentially adenosine
CC free antisense oligonucleotide (ON) to the airway epithelium of the
CC subject. The present sequence is an antisense oligonucleotide HUMIL5AS5
CC specific for the human IL5. The method can be used to treat airway

CC diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC disease, bronchitis and other airway diseases characterised by an
CC inflammatory response. By eliminating adenosine from the antisense ON,
CC its liberation upon antisense degradation is prevented, thereby
CC preventing adenosine-induced bronchoconstriction in patients with hyper-
CC reactive airways
XX
SQ Sequence 25 BP; 0 A; 14 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2764 GGGGAGCAGGGACACAGGCAGGAGG 2788
||||||||||||||||||||||||||
Db 25 GGGGAGCAGGGACACAGGCAGGAGG 1

RESULT 31
AAX54020/c
ID AAX54020 standard; DNA; 25 BP.
XX
AC AAX54020;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human IL-5 antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 1999-229400/19.
XX
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 49; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC -end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 25 BP; 0 A; 14 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2764 GGGGAGCAGGGACACAGGCAGGAGG 2788
||||||||||||||||||||||||||
Db 25 GGGGAGCAGGGACACAGGCAGGAGG 1

RESULT 32
AAA33464/c
ID AAA33464 standard; DNA; 25 BP.
XX
AC AAA33464;
XX
DT 28-JUL-2000 (first entry)
XX
DE Low adenosine antisense oligonucleotide SEQ ID NO:1153.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US017712.
XX
PR 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstruction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.
XX
PS Claim 18; Page 409; 1343pp; English.
XX
CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive

```
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 25 BP; 0 A; 14 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 25;  DB 1;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 69;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2764 GGGGAGCAGGGACACAGGCAGGAGG 2788
              |||||||||||||||||||||||||
Db         25 GGGGAGCAGGGACACAGGCAGGAGG 1


RESULT 33
AAF19586/c
ID   AAF19586 standard; DNA; 25 BP.
XX
AC   AAF19586;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human IL5 polynucleotide fragment #1153.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
XX
PR   06-APR-1999;   99US-0127958P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not trigger
PT   adenosine receptors during metabolism, useful e.g. for treating cancers
PT   and respiratory obstructions.
XX
PS   Claim 14; Page 208; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC   surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention
XX
SQ   Sequence 25 BP; 0 A; 14 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 25;  DB 1;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 69;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2764 GGGGAGCAGGGACACAGGCAGGAGG 2788
              |||||||||||||||||||||||||
Db         25 GGGGAGCAGGGACACAGGCAGGAGG 1


RESULT 34
ABK14339
ID   ABK14339 standard; DNA; 25 BP.
XX
AC   ABK14339;
XX
DT   23-APR-2002  (first entry)
XX
DE   Human interleukin-5 sense PCR primer.
XX
KW   Human; ss; PCR; primer; interleukin-5; neuroprotective; nootropic;
KW   anticonvulsant; cerebroprotective; antiparkinsonian; vulnerary;
KW   immunosuppressive; microglia cell line; autoimmune disease;
KW   neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW   Huntington's disease; amyotrophic lateral sclerosis; stroke;
KW   spinal cord injury; ataxia; brain trauma; multiple sclerosis;
KW   acquired immunodeficiency syndrome; AIDS-dementia.
XX
OS   Homo sapiens.
XX
PN   WO200204604-A2.
XX
PD   17-JAN-2002.
XX
PF   09-JUL-2001; 2001WO-IB001770.
XX
PR   10-JUL-2000; 2000WO-US018777.
PR   15-MAY-2001; 2001US-00855468.
PR   22-JUN-2001; 2001US-00887145.
XX
PA   (UYBR-) UNIV BRITISH COLUMBIA.
XX
PI   Kim SU;
XX
DR   WPI; 2002-148175/19.
```

XX
PT Genetically modified human microglia cell for treating neurodegenerative
PT disease, comprises demonstrable phagocytic properties, produces progeny
PT in culture, presents surface antigens, and contains modified human
PT genomic DNA.
XX
PS Example; Page 22; 46pp; English.
XX
CC The invention relates to a genetically modified human microglia cell
CC maintained stably in vitro which has (i) has demonstrable phagocytic
CC properties; (ii) produces progeny continuously in culture; (iii) presents
CC CD11b and CD68 as surface antigens; and (iv) contains human genomic DNA
CC that has been genetically modified to include a viral vector carrying at
CC least one DNA segment encoding an exogenous gene for intracellular
CC expression. The microglia cell line is useful for screening compounds for
CC the treatment of autoimmune disease, and is used in the treatment of a
CC neurodegenerative disorder e.g. Alzheimer's disease, Parkinson's disease,
CC Huntington's disease, amyotrophic lateral sclerosis, stroke, spinal cord
CC injuries, ataxia, brain trauma, multiple sclerosis and AIDS-(acquired
CC immunodeficiency syndrome)-dementia. The cell line is also useful for
CC isolating neurotoxic or neurotrophic molecules naturally produced by
CC human microglia. The present sequence is an RT-PCR (reverse transcriptase
CC PCR) primer which amplifies a segment of the mRNA for an expressed marker
CC gene, used to characterise the cell line
XX
SQ Sequence 25 BP; 4 A; 3 C; 8 G; 10 T; 0 U; 0 Other;

Query Match 0.8%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 555 GAGGATGCTTCTGCATTTGAGTTTG 579
||||||||||||||||||||||||||
Db 1 GAGGATGCTTCTGCATTTGAGTTTG 25

RESULT 35
ABZ95280/c
ID ABZ95280 standard; DNA; 25 BP.
XX
AC ABZ95280;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human IL-5 antisense fragment no.1144.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10522; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 25 BP; 0 A; 14 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 25; DB 1; Length 25;
Best Local Similarity 100.0%; Pred. No. 69;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2764 GGGGAGCAGGGACACAGGCAGGAGG 2788
||||||||||||||||||||||||||
Db 25 GGGGAGCAGGGACACAGGCAGGAGG 1

RESULT 36
ABD19254/c
ID ABD19254 standard; DNA; 25 BP.
XX
AC ABD19254;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human IL5 DNA fragment 1144.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense

```
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 10522; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 25 BP; 0 A; 14 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.8%;  Score 25;  DB 1;  Length 25;
  Best Local Similarity   100.0%;  Pred. No. 69;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2764 GGGGAGCAGGGACACAGGCAGGAGG 2788
              |||||||||||||||||||||||||
Db         25 GGGGAGCAGGGACACAGGCAGGAGG 1


RESULT 37
AAT75363
ID   AAT75363 standard; cDNA; 24 BP.
XX
AC   AAT75363;
XX
DT   24-DEC-1998  (first entry)
XX
DE   cDNA synthesis primer IL5-1.
XX
KW   ss; human; RAD50; DNA repair; tumour suppression; cancer; Septin-2;
KW   central nervous system; PCR; primer; amplification.
XX
OS   Synthetic.
XX
PN   WO9727284-A2.
XX
PD   31-JUL-1997.
XX
PF   24-JAN-1997;   97WO-US001299.
XX
PR   26-JAN-1996;   96US-00592126.
PR   17-JUL-1996;   96US-00687080.
XX
PA   (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI   Dolganov G;
XX
DR   WPI; 1997-393672/36.
XX
PT   Human tumour suppressor gene RAD50 - useful to detect predisposition to,
PT   decrease risk of and treat cancer, also Septin-2 homologues.
XX
PS   Example 1; Page 36; 195pp; English.
XX
CC   The primers AAT75354-T75378 were used to for cDNA synthesis in the method
CC   of the invention. Disclosed in the invention is human RAD50 (hRAD50)
CC   which is involved in DNA repair and has tumour suppression activity, and
CC   can be used to detect predisposition to, decrease the risk of or treat
CC   cancers, e.g. acute myeloid leukaemia, myelodysplastic syndrome, therapy
CC   related myelodysplastic syndrome, therapy related acute myeloid
CC   leukaemia, refractory anaemia or refractory anaemia with excess blasts.
CC   Also disclosed in this invention are human Septin-2 homologues which may
CC   be used as targets for cancer therapies and central nervous system
CC   directed treatment methods, and to measure the proliferative potential of
CC   selected cell types
XX
SQ   Sequence 24 BP; 9 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 76;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
              ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 38
AAV59945
ID   AAV59945 standard; DNA; 24 BP.
XX
AC   AAV59945;
XX
DT   25-NOV-1998  (first entry)
XX
DE   PCR primer IL5-1 used to amplify interleukin cDNA.
XX
KW   Human analogue; yeast RAD50; Drosophila Septin-2; Acyl-CoA synthetase;
KW   immunomodulatory activity; identification; activated T-cell; cytokine;
KW   interluekin; IL; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9838306-A1.
XX
PD   03-SEP-1998.
XX
PF   27-FEB-1997;   97WO-US003159.
XX
PR   27-FEB-1997;   97WO-US003159.
XX
PA   (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI   Dolganov G;
XX
DR   WPI; 1998-481207/41.
XX
PT   Novel human immunomodulatory poly:peptide(s) - have homology to the yeast
PT   RAD50 or Drosophila Septin-2 proteins.
XX
PS   Example 1; Page 27; 155pp; English.
XX
CC   PCR primers AAV59945-46 were used to identify cDNA encoding human
CC   cytokine interleukin (IL) from different cDNA pools, to provide an
CC   estimate of the degree to which the cytokine transcript is present. mRNA
CC   was isolated from activated T-cells, and converted to cDNA prior to
```

```
CC   amplification. The specification describes sequences encoding human
CC   analogues of the yeast RAD50, the Drosophila Septin-2 and Acyl-CoA
CC   synthetase. The proteins have immunomodulatory activity. The nucleic
CC   acids and proteins can be used to identify activated T-cells in a sample
CC   population. They can also be used to isolate and identify sequences
CC   encoding other proteins or other compounds having immunomodulatory
CC   activity
XX
SQ   Sequence 24 BP; 9 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 24;  DB 1;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 76;
  Matches   24;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1883 CACCAACTGTGCACTGAAGAAATC 1906
             ||||||||||||||||||||||||
Db          1 CACCAACTGTGCACTGAAGAAATC 24


RESULT 39
AAT50760
ID   AAT50760 standard; cDNA; 23 BP.
XX
AC   AAT50760;
XX
DT   24-SEP-1997  (first entry)
XX
DE   Ovine IL-5 gene forward primer.
XX
KW   Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12;
KW   livestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer;
KW   immunosuppression; allergy; reproductive system; growth; early maturity;
KW   antibody; diagnosis; immunopotentiator; PCR; amplify;
KW   early haematopoietic progenitor cell; cytotoxic cell; thymocyte;
KW   secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
XX
OS   Synthetic.
XX
PN   WO9700321-A1.
XX
PD   03-JAN-1997.
XX
PF   14-JUN-1996;   96WO-AU000360.
XX
PR   14-JUN-1995;   95AU-00003502.
PR   27-OCT-1995;   95AU-00006244.
XX
PA   (CSIR ) COMMONWEALTH SCI & IND RES ORG.
XX
PI   Seow H,  Wood P;
XX
DR   WPI; 1997-077528/07.
XX
PT   Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine
PT   adjuvants and to treat or prevent microbial infections in livestock.
XX
PS   Example 1; Page 23; 78pp; English.
XX
CC   The sequences given in AAT50760-69 are primers which were used to amplify
CC   the sequences encoding ovine interleukin-5 (IL-5), and interleukin-12 (IL
CC   -12) 35 kD subunit (partial and full length sequence) and the 40 kD
CC   subunit. Ovine IL-5 or IL-12 are used to treat and/or prevent infections
CC   in livestock (esp. cows and sheep), particularly where the animals are
CC   stressed, e.g. during transport. IL-5 and IL-12 can also be used as
CC   adjuvants in vaccines for veterinary use (partic. weakly immunogenic
CC   subunit or synthetic peptide vaccines). They may also be used to treat
CC   cancer, immunosuppression and allergy, to enhance/suppress the
CC   reproductive system and to promote growth or early maturity. Optionally
CC   interleukin can be delivered from constructs or delivery cells and
CC   antibodies are useful in enzyme immunoassays for rapid diagnosis of
CC   infection. The interleukins are immunopotentiators, especially IL-5
CC   promotes growth of early haematopoietic progenitor cells and generation
CC   of cytotoxic cells from thymocytes, also it stimulates production and
CC   secretion of IgM and IgA (in synergism with bacterial endotoxin). IL-12
CC   induces production of gamma-interferon by, and proliferation of, T and NK
CC   cells and increases the (non-)specific cytolytic lymphocyte response. The
CC   genetic constructs can also be used for in vitro production of IL-5 or -
CC   12
XX
SQ   Sequence 23 BP; 6 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 84;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        514 CTTTCTTTGCCAAAGGCAAACGC 536
              |||||||||||||||||||||||
Db          1 CTTTCTTTGCCAAAGGCAAACGC 23


RESULT 40
ABS52410/c
ID   ABS52410 standard; DNA; 23 BP.
XX
AC   ABS52410;
XX
DT   15-NOV-2002  (first entry)
XX
DE   Mouse Interleukin 5, IL-5, PCR primer #2.
XX
KW   Mouse; ss; PCR; primer; interleukin-5; IL-5; diferentiation domain;
KW   competitive population normalisation; nucleic acid quantitation.
XX
OS   Mus sp.
XX
PN   WO200261140-A2.
XX
PD   08-AUG-2002.
XX
PF   31-JAN-2002; 2002WO-US002892.
XX
PR   31-JAN-2001; 2001US-0265695P.
XX
PA   (AMBI-) AMBION INC.
XX
PI   Brown D,  Winkler MM;
XX
DR   WPI; 2002-619268/66.
XX
PT   Comparing one or more nucleic acid targets within two or more samples
PT   useful for the competitive analysis of nucleic acid samples regardless of
PT   their abundance, by competitive population (containing the target
PT   molecules) normalization.
XX
PS   Example 1; Page 63; 106pp; English.
XX
CC   The invention relates to comparing one or more nucleic acid targets
CC   within two or more samples comprising converting two or more complex
CC   nucleic acid samples into a single collection of normalised target
CC   molecules that can be used to compare the abundance of each of the
CC   targets in the original samples. The method comprises: (a) obtaining at
CC   least a first sample and a second sample, each (potentially) having at
CC   least a first nucleic acid target; (b) preparing at least a first tagged
CC   nucleic acid sample by appending at least a first nucleic acid tag
CC   comprising a first differentiation domain to the first nucleic acid
CC   target of the first sample (if the first nucleic acid target is present
CC   in the first sample); (c) preparing at least a second tagged nucleic acid
CC   sample by appending at least a second nucleic acid tag comprising a
CC   second differentiation domain to the first nucleic acid target of the
CC   second sample (if the first nucleic acid target is present in the second
CC   sample); (d) mixing the first tagged nucleic acid sample and the second
CC   tagged nucleic acid sample to create a sample mixture; (e) adding a
CC   limiting concentration of at least a first target specific primer to the
CC   sample mixture; (f) processing the sample mixture by a process comprising
CC   at least a first extension reaction to produce a limited concentration of
CC   first product nucleic acids complementary to the first nucleic acid
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CC   target of the first sample, if the first nucleic acid target is present
CC   in the first sample, and a limited concentration of second product
CC   nucleic acids complementary to the first nucleic acid target of the
CC   second sample, if the first nucleic acid target is present in the second
CC   sample, where any first product nucleic acids comprise the first
CC   differentiation domain and a section of the first nucleic acid target
CC   from the first sample and any second product nucleic acids comprise the
CC   second differentiation domain and a section of the first nucleic acid
CC   target from the second sample; (g) differentiating any first product
CC   nucleic acids from any second product nucleic acids; and (h) comparing
CC   the amount of the first nucleic acid target in the first sample, if any,
CC   to the amount of first nucleic acid target of the second sample, if any.
CC   The method is useful for comparing one or more nucleic acid targets
CC   within two or more samples, or the competitive analysis nucleic acid
CC   samples and is particularly useful for amplifying rare or limiting
CC   amounts of nucleic acid sequences for quantitative analysis. The present
CC   sequence is a PCR primer used to amplify mouse interleukin cDNA in order
CC   to make a membrane bound array for use in an experiment demonstrating the
CC   method of the invention
XX
SQ   Sequence 23 BP; 5 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 84;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2249 GGAGGAGAAGGACATTTTACTGC 2271
             |||||||||||||||||||||||
Db         23 GGAGGAGAAGGACATTTTACTGC 1


RESULT 41
ABS63333/c
ID   ABS63333 standard; DNA; 23 BP.
XX
AC   ABS63333;
XX
DT   28-OCT-2002  (first entry)
XX
DE   Interleukin-5 PCR primer #2.
XX
KW   PCR; primer; nucleic acid amplification; ss; interleukin-5;
KW   nucleic acid target detection.
XX
OS   Unidentified.
XX
PN   WO200261145-A2.
XX
PD   08-AUG-2002.
XX
PF   31-JAN-2002; 2002WO-US003169.
XX
PR   31-JAN-2001; 2001US-0265692P.
XX
PA   (AMBI-) AMBION INC.
XX
PI   Winkler MM,  Brown D;
XX
DR   WPI; 2002-619271/66.
XX
PT   Comparing one or more nucleic acid targets within two or more samples by
PT   hybridizing the samples into target fractions then amplification prior to
PT   nucleic acid target quantification.
XX
PS   Example 1; Page 53; 84pp; English.
XX
CC   This invention relates to a novel method for comparing one or more
CC   nucleic acid targets within two or more samples. The method comprises
CC   preparing a sample mixture by obtaining at least a first sample and a
CC   second sample, each potentially with at least a first nucleic acid target
CC   and mixing the first nucleic acid sample and the second nucleic acid
CC   sample to create a sample mixture. The method of the invention is useful
CC   for fractionating nucleic acid samples into target fractions then using
CC   nucleic acids amplification to quantitatively assess the nucleic acid
CC   target within each fraction. This method as compared to prior art methods
CC   facilitates the analysis of more target sequences to determine nucleic
CC   acid profiles of limited tissue samples. The present sequence represents
CC   a PCR primer used in the method of the invention
XX
SQ   Sequence 23 BP; 5 A; 8 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 23;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 84;
  Matches   23;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2249 GGAGGAGAAGGACATTTTACTGC 2271
             |||||||||||||||||||||||
Db         23 GGAGGAGAAGGACATTTTACTGC 1


RESULT 42
AAX99415
ID   AAX99415 standard; DNA; 27 BP.
XX
AC   AAX99415;
XX
DT   12-OCT-1999  (first entry)
XX
DE   Artificial sequence of an oligomer containing the palindromic sequence
DE   from hIL-5 promoter.
XX
KW   interleukin; palindrome; oligomer; inflammation; cytokines; asthma;
KW   rheumatoid arthritis; inhibition; ds.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9937760-A1.
XX
PD   29-JUL-1999.
XX
PF   20-JAN-1999;   99WO-GB000179.
XX
PR   22-JAN-1998;   98GB-00001391.
PR   11-NOV-1998;   98GB-00024794.
XX
PA   (BTGI-) BTG INT LTD.
XX
PI   Eagles PAM,  Zheng RQ;
XX
DR   WPI; 1999-458690/38.
XX
PT   New double stranded DNA oligomers, used for inhibiting cytokine
PT   transcription for treating, e.g. asthma and rheumatoid arthritis.
XX
PS   Disclosure; Page 11; 33pp; English.
XX
CC   This artificial sequence is an oligomer containing the palindromic
CC   sequence from human interleukin 5 (hIL-5) promoter. These oligomers can
CC   be used as inhibitors of transcription of cytokines. They can be used in
CC   the therapy of a disease associated with excessive production in vivo of
CC   a cytokine, the gene for which corresponds to the palindrome-containing
CC   sequence in (I) in its 5'-non-coding region, or which can be alleviated
CC   by reducing the production in vivo of the cytokine (claimed). In
CC   particular, the cytokine may be interleukin-5 (IL-5) and the associated
CC   disease is asthma or the cytokine may be tumour necrosis factor- alpha
CC   and the associated disease is rheumatoid arthritis (claimed). They can
CC   also be used for treating e.g. allergy, chronic obstructive airways
CC   disease, inflammation, autoimmune diseases, cancer, angina, fibrosis,
CC   wound scarring, septic shock syndrome or excessive cellular proliferation
XX
SQ   Sequence 27 BP; 4 A; 9 C; 9 G; 5 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22.4;  DB 1;  Length 27;
  Best Local Similarity   95.8%;  Pred. No. 1e+02;
  Matches   23;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy          31 CGACCCTGCCAAGGCTTGGCATTT 54
               ||||||||||||||||||||| ||
Db           1 CGACCCTGCCAAGGCTTGGCAGTT 24
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RESULT 43
AAQ57190
ID   AAQ57190 standard; mRNA; 22 BP.
XX
AC   AAQ57190;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Enzymatic RNA molecule IL-5 mRNA target sequence.
XX
KW   Interleukin-5; specific; cleavage; target RNA; protein; expression;
KW   inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention;
KW   psoriasis; asthma; inflammatory diseases; restenosis;
KW   cardiovascular condition; hypertension; arthritis; ss.
XX
OS   Synthetic.
XX
PN   WO9402595-A1.
XX
PD   03-FEB-1994.
XX
PF   02-JUL-1993;   93WO-US006316.
XX
PR   17-JUL-1992;   92US-00916763.
PR   07-DEC-1992;   92US-00987132.
PR   07-DEC-1992;   92US-00989848.
PR   07-DEC-1992;   92US-00989849.
PR   19-JAN-1993;   93US-00008895.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Sullivan SM,  Draper KG;
XX
DR   WPI; 1994-048853/06.
XX
PT   Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT   inflammatory, arthritic, stenotic or cardiovascular diseases or
PT   conditions.
XX
PS   Claim 3; Page 17; 65pp; English.
XX
CC   This is an IL-5 mRNA target sequence (nucleotide no. 33) of an enzymatic
CC   RNA molecule (ribozyme) which cleaves mRNA associated with the
CC   development or maintenance of a psoriatic or asthmatic condition. The
CC   concn. of the ribozyme necessary to effect a therapeutic treatment is
CC   lower than that of an antisense oligonucleotide and the specificity of
CC   action is higher. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 22 BP; 5 A; 5 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        541 CGTTTCAGAGCCATGAGGATGC 562
              ||||||||||||||||||||||
Db          1 CGTTTCAGAGCCATGAGGATGC 22
```

```
RESULT 44
AAQ57194
ID   AAQ57194 standard; mRNA; 22 BP.
XX
AC   AAQ57194;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Enzymatic RNA molecule IL-5 mRNA target sequence.
XX
KW   Interleukin-5; specific; cleavage; target RNA; protein; expression;
KW   inhibitor; inhibition; ribozyme; treatment; prophylaxis; prevention;
KW   psoriasis; asthma; inflammatory diseases; restenosis;
KW   cardiovascular condition; hypertension; arthritis; ss.
XX
OS   Synthetic.
XX
PN   WO9402595-A1.
XX
PD   03-FEB-1994.
XX
PF   02-JUL-1993;   93WO-US006316.
XX
PR   17-JUL-1992;   92US-00916763.
PR   07-DEC-1992;   92US-00987132.
PR   07-DEC-1992;   92US-00989848.
PR   07-DEC-1992;   92US-00989849.
PR   19-JAN-1993;   93US-00008895.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Sullivan SM,  Draper KG;
XX
DR   WPI; 1994-048853/06.
XX
PT   Enzymatic RNA molecules which cleave mRNA - used to treat or prevent
PT   inflammatory, arthritic, stenotic or cardiovascular diseases or
PT   conditions.
XX
PS   Claim 3; Page 17; 65pp; English.
XX
CC   This is an IL-5 mRNA target sequence (nucleotide no. 158) of an enzymatic
CC   RNA molecule (ribozyme) which cleaves mRNA associated with the
CC   development or maintenance of a psoriatic or asthmatic condition. The
CC   concn. of the ribozyme necessary to effect a therapeutic treatment is
CC   lower than that of an antisense oligonucleotide and the specificity of
CC   action is higher. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 22 BP; 6 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        666 TACTCATCGAACTCTGCTGATA 687
              ||||||||||||||||||||||
Db          1 TACTCATCGAACTCTGCTGATA 22
```

```
RESULT 45
AAQ74032/c
ID   AAQ74032 standard; DNA; 22 BP.
XX
AC   AAQ74032;
XX
DT   29-JAN-1996  (first entry)
XX
DE   Human interleukin 5 primer.
XX
KW   Interleukin 5; primer; mRNA; specificity; pharmaceutical; ss.
XX
OS   Synthetic.
XX
PN   JP07123984-A.
XX
PD   16-MAY-1995.
XX
PF   05-NOV-1993;   93JP-00275852.
XX
```

```
PR   05-NOV-1993;   93JP-00275852.
XX
PA   (HITB ) HITACHI CHEM CO LTD.
XX
DR   WPI; 1995-211627/28.
XX
PT   A primer for the detection and the determn. of a specific messenger RNA -
PT   can detect and determine specific mRNA(s) with high reliability.
XX
PS   Claim 1; Page 14; 35pp; Japanese.
XX
CC   AAQ74031-Q74032 are primers used for the amplification of human
CC   interleukin-5 (AAQ74056). They are used specifically for the detection
CC   and isolation of this sequence. The primers have the advantage of high
CC   sensitivity and reliability and are useful in the pharmaceutical industry
XX
SQ   Sequence 22 BP; 4 A; 5 C; 5 G; 8 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2139 CGGAGAGTAAACCAATTCCTAG 2160
              ||||||||||||||||||||||
Db         22 CGGAGAGTAAACCAATTCCTAG 1


RESULT 46
AAQ74031
ID   AAQ74031 standard; DNA; 22 BP.
XX
AC   AAQ74031;
XX
DT   29-JAN-1996  (first entry)
XX
DE   Human interleukin 5 primer.
XX
KW   Interleukin 5; primer; mRNA; specificity; pharmaceutical; ss.
XX
OS   Synthetic.
XX
PN   JP07123984-A.
XX
PD   16-MAY-1995.
XX
PF   05-NOV-1993;   93JP-00275852.
XX
PR   05-NOV-1993;   93JP-00275852.
XX
PA   (HITB ) HITACHI CHEM CO LTD.
XX
DR   WPI; 1995-211627/28.
XX
PT   A primer for the detection and the determn. of a specific messenger RNA -
PT   can detect and determine specific mRNA(s) with high reliability.
XX
PS   Claim 1; Page 14; 35pp; Japanese.
XX
CC   AAQ74031-Q74032 are primers used for the amplification of human
CC   interleukin-5 (AAQ74056). They are used specifically for the detection
CC   and isolation of this sequence. The primers have the advantage of high
CC   sensitivity and reliability and are useful in the pharmaceutical industry
XX
SQ   Sequence 22 BP; 7 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        619 GAAATTCCCACAAGTGCATTGG 640
              ||||||||||||||||||||||
Db          1 GAAATTCCCACAAGTGCATTGG 22


RESULT 47
AAV01432
ID   AAV01432 standard; DNA; 22 BP.
XX
AC   AAV01432;
XX
DT   27-MAR-1998  (first entry)
XX
DE   Human CLE0 spanning nucleotides -60 to -39 of IL-5 prmoter.
XX
KW   Human; interleukin-5; IL-5; palindromic regulatory element; promoter;
KW   inhibition; modulation; asthma; eosinophilia; CLE0; ss.
XX
OS   Homo sapiens.
XX
PN   WO9733990-A1.
XX
PD   18-SEP-1997.
XX
PF   14-MAR-1997;   97WO-AU000162.
XX
PR   15-MAR-1996;   96AU-00008691.
XX
PA   (TVWT-) TVW TELETHON INST CHILD HEALTH RES.
XX
PI   Sanderson CJ,  Mordvinov VA;
XX
DR   WPI; 1997-470871/43.
XX
PT   Nucleic acid sequence that inhibits activity of the interleukin-5
PT   promoter - and proteins that interact with this sequence to modulate IL-5
PT   gene expression, for treating asthma, eosinophilia or immune-compromised
PT   states.
XX
PS   Example 4; Page 14; 50pp; English.
XX
CC   The present sequence is human CLE0, which was used as control in an assay
CC   of human interleukin-5 (hIL-5) promoter palindromic regulatory element
CC   (PRE1) activity. PRE1 inhibits the activity of the hIL-5 promoter and
CC   therefore IL-5 expression. PRE1 can be used to modulate IL-5 activity by
CC   acting on the corresponding region of the hIL-5 promoter, especially in
CC   cases of asthma and eosinophilia or in immunocompromised subjects. PRE1
CC   specifically inhibits transcription from the IL-5 promoter, as no such
CC   sequence is present in genes encoding other cytokines
XX
SQ   Sequence 22 BP; 8 A; 4 C; 2 G; 8 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        450 GAAATTATTCATTTCCTCAAAG 471
              ||||||||||||||||||||||
Db          1 GAAATTATTCATTTCCTCAAAG 22


RESULT 48
AAT47000
ID   AAT47000 standard; DNA; 22 BP.
XX
AC   AAT47000;
XX
DT   01-DEC-1997  (first entry)
XX
DE   Interleukin-5 primer A.
XX
KW   PCR; polymerase chain reaction; primer; amplify; beta-actin; IL-2; IL-4;
KW   interferon-gamma; interleukin-2; peripheral blood mononuclear cell; IL-5;
KW   granulocyte macrophage colony stimulating factor; GM-CSF; cytokine; PBMC;
KW   CD8 cell; T-cell; cell mediated immunity; cytotoxic; CD45RA; IL-10; HIV;
KW   surface marker; naive T-cell; thymus; proliferative response; antibody;
KW   cognate antigen; immuno-compromised; cancer; viral infection;
```

KW autoimmune disease; ss.
XX
OS Synthetic.
XX
PN WO9712244-A1.
XX
PD 03-APR-1997.
XX
PF 26-SEP-1996; 96WO-US015460.
XX
PR 27-SEP-1995; 95US-0004364P.
XX
PA (STRD) UNIV LELAND STANFORD JUNIOR.
XX
PI Roederer M, Rabin R, Herzenberg LA, Herzenberg LA;
XX
DR WPI; 1997-213057/19.
XX
PT Detection of naive T cells in subjects - useful to identify production
PT stimulating drugs for immunocompromised subject treatment.
XX
PS Disclosure; Page 23; 56pp; English.
XX
CC AAT46992-T47005 represent amplification primers for DNA encoding
CC cytokines from CD8 T-cells. This sequence and AAT47001 are primers for
CC the interleukin-5 gene. CD8 cells provide cell mediated immunity through
CC both cytotoxic and suppressor mechanisms. The naive subset of CD8 cells
CC expresses the CD45RA surface marker, and make a relatively poor cytokine
CC response after T-cell receptor stimulation. Naive T-cells are cells which
CC have recently emigrated from the thymus and have a predominantly
CC proliferative response when exposed to cognate antigens for the first
CC time. These primers can be used in the method of the invention. The
CC method of the invention is for evaluating the efficacy of a drug to
CC stimulate the production of naive T-cells. The method comprises obtaining
CC a sample containing peripheral blood mononuclear cells from a subject. A
CC suitable dose of a drug is then administered before a second sample is
CC obtained. The T-cell populations are then isolated from the samples. The
CC number of naive T-cells in each population is then determined by
CC detecting T-cell immunoreactivity with at least 2 antibodies, selectively
CC reactive with naive T-cell surface proteins. If the number of naive T-
CC cells in the second population is significantly greater than the number
CC in the first, then the drug is identified as being effective. The method
CC can be used to identify naive T-cell count elevating drugs, particularly
CC in immuno-compromised subjects, e.g. HIV positive subjects, cancer
CC patients or individuals with viral infection or autoimmune disease
XX
SQ Sequence 22 BP; 3 A; 7 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 92;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 579 GCTAGCTCTTGGAGCTGCCTAC 600
||||||||||||||||||||||
Db 1 GCTAGCTCTTGGAGCTGCCTAC 22

RESULT 49
AAT76225/c
ID AAT76225 standard; DNA; 22 BP.
XX
AC AAT76225;
XX
DT 12-SEP-1997 (first entry)
XX
DE Human IL5 antisense oligonucleotide HUMIL5AS6.
XX
KW Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS Synthetic.
XX
PN WO9640162-A1.
XX
PD 19-DEC-1996.
XX
PF 06-JUN-1996; 96WO-US009306.
XX
PR 07-JUN-1995; 95US-00474497.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW, Metzger WJ;
XX
DR WPI; 1997-051871/05.
XX
PT Treatment of airway diseases such as asthma - by topically applying
PT adenosine-free antisense oligo:nucleotide to airway epithelium of
PT subject.
XX
PS Claim 5; Page 31; 71pp; English.
XX
CC A method for treating airway disease in a subject has been produced,
CC which involves the topical administration of an essentially adenosine
CC free antisense oligonucleotide (ON) to the airway epithelium of the
CC subject. The present sequence is an antisense oligonucleotide HUMIL5AS6
CC specific for the human IL5. The method can be used to treat airway
CC diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC disease, bronchitis and other airway diseases characterised by an
CC inflammatory response. By eliminating adenosine from the antisense ON,
CC its liberation upon antisense degradation is prevented, thereby
CC preventing adenosine-induced bronchoconstriction in patients with hyper-
CC reactive airways
XX
SQ Sequence 22 BP; 1 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 92;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2997 AGAGAGGAAGCCAGAAACCCTC 3018
||||||||||||||||||||||
Db 22 AGAGAGGAAGCCAGAAACCCTC 1

RESULT 50
AAX54021/c
ID AAX54021 standard; DNA; 22 BP.
XX
AC AAX54021;
XX
DT 05-JUL-1999 (first entry)
XX
DE Human IL-5 antisense oligonucleotide fragment.
XX
KW Antisense oligonucleotide; multiple target; antisense treatment;
KW impaired respiration; inflammation; lung disease;
KW pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW acute asthma; allergy; asthma; impeded respiration;
KW respiratory distress syndrome; pain; cystic fibrosis;
KW pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW prostate cancer; ss.
XX
OS Synthetic.
XX
PN WO9913886-A1.
XX
PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.

```
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 1999-229400/19.
XX
PT   New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT   vasoconstriction.
XX
PS   Disclosure; Page 49; 120pp; English.
XX
CC   The specification describes antisense oligonucleotides (AAX52869-X55271)
CC   directed against at least 2 mRNAs selected from target genes, coding and
CC   non-coding regions of RNAs corresponding to target genes, gene initiation
CC   codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC   -end and the juxta-section between coding and non-coding regions and all
CC   segments of RNAs encoding proteins associated with one or more diseases,
CC   conditions or mixtures. The antisense oligonucleotides may be derived
CC   from sequences AAX55272-74. These multiple target oligonucleotides
CC   (specifically AAX55180-271) can be used for the antisense treatment of
CC   diseases and conditions. Typical diseases and conditions are those
CC   associated with impaired respiration and inflammation, including lung
CC   diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC   acute asthma, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC   pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC   disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC   colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC   hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC   well as all types of cancers which may metastasize or have metastasized
CC   to the lungs, including breast and prostate cancer
XX
SQ   Sequence 22 BP; 1 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2997 AGAGAGGAAGCCAGAAACCCTC 3018
              ||||||||||||||||||||||
Db         22 AGAGAGGAAGCCAGAAACCCTC 1


RESULT 51
AAA33465/c
ID   AAA33465 standard; DNA; 22 BP.
XX
AC   AAA33465;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1154.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Claim 18; Page 409; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 22 BP; 1 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2997 AGAGAGGAAGCCAGAAACCCTC 3018
              ||||||||||||||||||||||
Db         22 AGAGAGGAAGCCAGAAACCCTC 1


RESULT 52
AAF19587/c
ID   AAF19587 standard; DNA; 22 BP.
XX
AC   AAF19587;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human IL5 polynucleotide fragment #1154.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
```

```
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
XX
PR   06-APR-1999;   99US-0127958P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not trigger
PT   adenosine receptors during metabolism, useful e.g. for treating cancers
PT   and respiratory obstructions.
XX
PS   Claim 14; Page 208; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC   surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention
XX
SQ   Sequence 22 BP; 1 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2997 AGAGAGGAAGCCAGAAACCCTC 3018
              ||||||||||||||||||||||
Db         22 AGAGAGGAAGCCAGAAACCCTC 1


RESULT 53
AAF25544
ID   AAF25544 standard; DNA; 22 BP.
XX
AC   AAF25544;
XX
DT   04-APR-2001  (first entry)
XX
DE   Multiplex PCR primer IL-5-exup.
XX
KW   Multiplex PCR; detection; amplification; probe; PIRS; leukemia;
KW   primer-integrated reporter sequence; meningitis; encephalitis;
KW   cytokine response; primer; ss.
XX
OS   Unidentified.
XX
PN   DE19925448-A1.
XX
PD   07-DEC-2000.
XX
PF   02-JUN-1999;   99DE-01025448.
XX
PR   02-JUN-1999;   99DE-01025448.
XX
PA   (REPP/) REPP R.
PA   (RASC/) RASCHER W.
XX
PI   Repp R,  Rascher W;
XX
DR   WPI; 2001-072123/09.
XX
PT   Detecting products of nucleic acid amplification, useful for diagnosis of
PT   e.g. leukemia, comprising two primers, one containing a primer-integrated
PT   reporter sequence, and labeled probe.
XX
PS   Example 3; Page 12; 22pp; German.
XX
CC   This invention describes a novel method for the detection of products of
CC   a nucleic acid (NA) amplification reaction (AR) using at least 2 primers,
CC   where one of the primers (I) contains a 5'-homo-tail sequence, a probe
CC   binding sequence designated a primer-integrated reporter sequence (PIRS)
CC   and a sequence specific for the NA to be amplified, and a labeled probe
CC   (III). The method is used for the diagnosis of diseases, especially
CC   leukemia, meningitis, encephalitis or cytokine response. The need for
CC   expensive probe oligonucleotide additives is avoided
XX
SQ   Sequence 22 BP; 7 A; 4 C; 8 G; 3 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1909 TCAGGGAATAGGCACACTGGAG 1930
              ||||||||||||||||||||||
Db          1 TCAGGGAATAGGCACACTGGAG 22


RESULT 54
AAF25545/c
ID   AAF25545 standard; DNA; 22 BP.
XX
AC   AAF25545;
XX
DT   04-APR-2001  (first entry)
XX
DE   Multiplex PCR primer IL-5-exdo.
XX
KW   Multiplex PCR; detection; amplification; probe; PIRS; leukemia;
KW   primer-integrated reporter sequence; meningitis; encephalitis;
KW   cytokine response; primer; ss.
XX
OS   Unidentified.
XX
PN   DE19925448-A1.
XX
PD   07-DEC-2000.
XX
PF   02-JUN-1999;   99DE-01025448.
XX
PR   02-JUN-1999;   99DE-01025448.
XX
PA   (REPP/) REPP R.
PA   (RASC/) RASCHER W.
XX
```

PI Repp R, Rascher W;
XX
DR WPI; 2001-072123/09.
XX
PT Detecting products of nucleic acid amplification, useful for diagnosis of
PT e.g. leukemia, comprising two primers, one containing a primer-integrated
PT reporter sequence, and labeled probe.
XX
PS Example 3; Page 12; 22pp; German.
XX
CC This invention describes a novel method for the detection of products of
CC a nucleic acid (NA) amplification reaction (AR) using at least 2 primers,
CC where one of the primers (I) contains a 5'-homo-tail sequence, a probe
CC binding sequence designated a primer-integrated reporter sequence (PIRS)
CC and a sequence specific for the NA to be amplified, and a labeled probe
CC (III). The method is used for the diagnosis of diseases, especially
CC leukemia, meningitis, encephalitis or cytokine response. The need for
CC expensive probe oligonucleotide additives is avoided
XX
SQ Sequence 22 BP; 6 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 92;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2178 CTTGGTGTAATGAACACCGAGT 2199
||||||||||||||||||||||
Db 22 CTTGGTGTAATGAACACCGAGT 1

RESULT 55
ABZ95281/c
ID ABZ95281 standard; DNA; 22 BP.
XX
AC ABZ95281;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human IL-5 antisense fragment no.1145.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 10523; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 22 BP; 1 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 22; DB 1; Length 22;
Best Local Similarity 100.0%; Pred. No. 92;
Matches 22; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2997 AGAGAGGAAGCCAGAAACCCTC 3018
||||||||||||||||||||||
Db 22 AGAGAGGAAGCCAGAAACCCTC 1

RESULT 56
ABD19255/c
ID ABD19255 standard; DNA; 22 BP.
XX
AC ABD19255;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human IL5 DNA fragment 1145.
XX
KW Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW pulmonary transplantation rejection; ds.
XX
OS Homo sapiens.
XX
PN WO200285309-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013143.
XX
PR 24-APR-2001; 2001US-0286036P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-093058/08.
XX
PT Pharmaceutical composition for treating asthma, has antisense
PT oligonucleotide containing less percentage of adenosine, targeted to
PT nucleic acids associated with lung airway or lung dysfunction, and
PT bronchodilating agent.
XX
PS Claim 15; SEQ ID NO 10523; 763pp; English.
XX

```
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 22 BP; 1 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 22;  DB 1;  Length 22;
  Best Local Similarity   100.0%;  Pred. No. 92;
  Matches   22;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2997 AGAGAGGAAGCCAGAAACCCTC 3018
             ||||||||||||||||||||||
Db         22 AGAGAGGAAGCCAGAAACCCTC 1


RESULT 57
AAQ86376
ID   AAQ86376 standard; DNA; 21 BP.
XX
AC   AAQ86376;
XX
DT   25-MAR-2003  (revised)
DT   05-DEC-1995  (first entry)
XX
DE   Interleukin-5 detection PCR primer #1 in BCTD-huBM mice.
XX
KW   Primer; PCR; amplification; human; cytokine gene expression; HIV; mouse;
KW   B-cell; T-cell; thymus; liver; tissue implant; immunity; monocyte; model;
KW   peripheral lymphoid compartment; pathogenesis; beta-2 microglobulin;
KW   peripheral blood mononuclear cell; spleen; lymph node; interleukin;
KW   tumour necrosis factor; leukemia inhibitory factor; granulocyte;
KW   macrophage; colony stimulating factor; bone marrow; ss.
XX
OS   Synthetic.
XX
PN   WO9509235-A1.
XX
PD   06-APR-1995.
XX
PF   28-SEP-1994;   94WO-US010957.
XX
PR   28-SEP-1993;   93US-00127880.
PR   02-JUN-1994;   94US-00252773.
XX
PA   (YESH ) UNIV YESHIVA EINSTEIN COLLEGE.
XX
PI   Goldstein H,  Kollmann TR;
XX
DR   WPI; 1995-154956/20.
XX
PT   B-cell, T-cell deficient (BTCD) chimeric mice - useful as model for
PT   assaying pathogenesis of human disease e.g. HIV-1, and efficacy and
PT   toxicity.
XX
PS   Example 8; Page 57; 86pp; English.
XX
CC   Primers AAQ86362-83 and AAQ87677-82 were used to detect the expression of
CC   various cytokines genes in HIV infected B-cell, T-cell deficient (BCTD)
CC   mice which have been transformed with human thymus, liver tissue and bone
CC   marrow implants (BCTD-huBM mice). These mice are immune-deficient for
CC   murine B- and T-cells but can express human immunity cells such as T-
CC   cells and monocytes in their peripheral lymphoid compartments. These mice
CC   are useful as models for the pathogenesis of human disease, e.g. for
CC   assaying the dissemination of HIV. The primers are used to assay the
CC   effect of HIV on cytokine gene expression e.g. as a model for human
CC   patients with HIV. The primers AAQ86376-7 are used to detect the
CC   expression of the interleukin-5 gene, using cDNA derived from mRNA
CC   extracted from the long bones of BCTD-HuBM mice. (Updated on 25-MAR-2003
CC   to correct PN field.)
XX
SQ   Sequence 21 BP; 2 A; 6 C; 6 G; 7 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        577 TTGCTAGCTCTTGGAGCTGCC 597
              |||||||||||||||||||||
Db          1 TTGCTAGCTCTTGGAGCTGCC 21


RESULT 58
AAT38974
ID   AAT38974 standard; DNA; 21 BP.
XX
AC   AAT38974;
XX
DT   29-MAY-1997  (first entry)
XX
DE   Interleukin IL-5 5' PCR primer.
XX
KW   Cytokine; expression profile; genital wart; interleukin 12; IL-12;
KW   tumour regression; adjuvant; polymerase chain reaction; PCR;
KW   condyloma acuminata; human papilloma virus; HPV-6; HPV-11; HPV16; HPV18;
KW   anogenital; cutaneous; laryngeal; oesophageal; cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9629091-A1.
XX
PD   26-SEP-1996.
XX
PF   22-MAR-1996;   96WO-GB000686.
XX
PR   22-MAR-1995;   95GB-00005784.
XX
PA   (UYCA-) UNIV CAMBRIDGE TECH SERVICES LTD.
XX
PI   Stanley MA,  Scarpini CG;
XX
DR   WPI; 1996-442947/44.
XX
PT   Use of interleukin-12 to treat papilloma virus-associated lesions - esp.
PT   as a vaccine adjuvant with papilloma virus antigen for immuno:therapy of
PT   warts or tumours.
XX
PS   Disclosure; Page 14; 32pp; English.
XX
CC   RNA was extracted from genital lesions, reverse transcribed to produce
```

```
CC   cDNA and then the cDNA was used as the template for PCR amplification of
CC   various cytokines using the primers in AAT38964- AAT39005. To confirm the
CC   identity of amplified cDNA, digoxigenin- labelled probes specific for
CC   each cytokine (see AAT39006-T39021) were hybridised with Southern blots
CC   of amplified sequences. The expression profile for regressing and non-
CC   regressing warts was established and compared to cytokine expression
CC   patterns in normal cervical tissue. Results showed that interleukin 12 is
CC   barely expressed (if at all) in non-regressing warts, but is expressed in
CC   regressing warts. This suggests a central role for IL-12 in wart
CC   regression. It has been found that IL-12 can be used (especially as a
CC   vaccine adjuvant) for treating papilloma virus-associated lesions such as
CC   condyloma acuminata (anogenital warts) caused by human papilloma virus
CC   type 6 (HPV-6) and/or HPV-11 and more generally for treatment of tumours
CC   associated with HPV16 and HPV18 infection e.g. anogenital, cutaneous,
CC   laryngeal and oesophageal cancers
XX
SQ   Sequence 21 BP; 4 A; 3 C; 6 G; 8 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        553 ATGAGGATGCTTCTGCATTTG 573
              |||||||||||||||||||||
Db          1 ATGAGGATGCTTCTGCATTTG 21


RESULT 59
AAV01427
ID   AAV01427 standard; DNA; 21 BP.
XX
AC   AAV01427;
XX
DT   27-MAR-1998  (first entry)
XX
DE   IL-5 promoter wild type palindromic regulatory element, wtPRE1.
XX
KW   Human; interleukin-5; IL-5; palindromic regulatory element; promoter;
KW   inhibition; modulation; asthma; eosinophilia; ss.
XX
OS   Homo sapiens.
XX
PN   WO9733990-A1.
XX
PD   18-SEP-1997.
XX
PF   14-MAR-1997;   97WO-AU000162.
XX
PR   15-MAR-1996;   96AU-00008691.
XX
PA   (TVWT-) TVW TELETHON INST CHILD HEALTH RES.
XX
PI   Sanderson CJ,  Mordvinov VA;
XX
DR   WPI; 1997-470871/43.
XX
PT   Nucleic acid sequence that inhibits activity of the interleukin-5
PT   promoter - and proteins that interact with this sequence to modulate IL-5
PT   gene expression, for treating asthma, eosinophilia or immune-compromised
PT   states.
XX
PS   Example 4; Page 14; 50pp; English.
XX
CC   The present sequence is the human interleukin-5 (hIL-5) promoter wild
CC   type palindromic regulatory element (wtPRE1), which inhibits the activity
CC   of the hIL-5 promoter and therefore IL-5 expression. wtPRE1 can be used
CC   to modulate IL-5 activity by acting on the corresponding region of the
CC   hIL-5 promoter, especially in cases of asthma and eosinophilia or in
CC   immunocompromised subjects. wtPRE1 specifically inhibits transcription
CC   from the IL-5 promoter, as no such sequence is present in genes encoding
CC   other cytokines
XX
SQ   Sequence 21 BP; 6 A; 4 C; 4 G; 7 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        412 CGATATGCCATTATTAGGCAT 432
              |||||||||||||||||||||
Db          1 CGATATGCCATTATTAGGCAT 21


RESULT 60
AAT76221/c
ID   AAT76221 standard; DNA; 21 BP.
XX
AC   AAT76221;
XX
DT   12-SEP-1997  (first entry)
XX
DE   Human IL5 antisense oligonucleotide HUMIL5AS2.
XX
KW   Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW   chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS   Synthetic.
XX
PN   WO9640162-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US009306.
XX
PR   07-JUN-1995;   95US-00474497.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW,  Metzger WJ;
XX
DR   WPI; 1997-051871/05.
XX
PT   Treatment of airway diseases such as asthma - by topically applying
PT   adenosine-free antisense oligo:nucleotide to airway epithelium of
PT   subject.
XX
PS   Claim 5; Page 31; 71pp; English.
XX
CC   A method for treating airway disease in a subject has been produced,
CC   which involves the topical administration of an essentially adenosine
CC   free antisense oligonucleotide (ON) to the airway epithelium of the
CC   subject. The present sequence is an antisense oligonucleotide HUMIL5AS2
CC   specific for the human IL5. The method can be used to treat airway
CC   diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC   disease, bronchitis and other airway diseases characterised by an
CC   inflammatory response. By eliminating adenosine from the antisense ON,
CC   its liberation upon antisense degradation is prevented, thereby
CC   preventing adenosine-induced bronchoconstriction in patients with hyper-
CC   reactive airways
XX
SQ   Sequence 21 BP; 0 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        522 GCCAAAGGCAAACGCAGAACG 542
              |||||||||||||||||||||
Db         21 GCCAAAGGCAAACGCAGAACG 1


RESULT 61
AAT75364/c
ID   AAT75364 standard; cDNA; 21 BP.
XX
AC   AAT75364;
```

```
XX
DT   24-DEC-1998  (first entry)
XX
DE   cDNA synthesis primer IL4-2.
XX
KW   ss; human; RAD50; DNA repair; tumour suppression; cancer; Septin-2;
KW   central nervous system; PCR; primer; amplification.
XX
OS   Synthetic.
XX
PN   WO9727284-A2.
XX
PD   31-JUL-1997.
XX
PF   24-JAN-1997;   97WO-US001299.
XX
PR   26-JAN-1996;   96US-00592126.
PR   17-JUL-1996;   96US-00687080.
XX
PA   (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI   Dolganov G;
XX
DR   WPI; 1997-393672/36.
XX
PT   Human tumour suppressor gene RAD50 - useful to detect predisposition to,
PT   decrease risk of and treat cancer, also Septin-2 homologues.
XX
PS   Example 1; Page 36; 195pp; English.
XX
CC   The primers AAT75354-T75378 were used to for cDNA synthesis in the method
CC   of the invention. Disclosed in the invention is human RAD50 (hRAD50)
CC   which is involved in DNA repair and has tumour suppression activity, and
CC   can be used to detect predisposition to, decrease the risk of or treat
CC   cancers, e.g. acute myeloid leukaemia, myelodysplastic syndrome, therapy
CC   related myelodysplastic syndrome, therapy related acute myeloid
CC   leukaemia, refractory anaemia or refractory anaemia with excess blasts.
CC   Also disclosed in this invention are human Septin-2 homologues which may
CC   be used as targets for cancer therapies and central nervous system
CC   directed treatment methods, and to measure the proliferative potential of
CC   selected cell types
XX
SQ   Sequence 21 BP; 4 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
             |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 62
AAV59946/c
ID   AAV59946 standard; DNA; 21 BP.
XX
AC   AAV59946;
XX
DT   25-NOV-1998  (first entry)
XX
DE   PCR primer IL4-2 used to amplify interleukin cDNA.
XX
KW   Human analogue; yeast RAD50; Drosophila Septin-2; Acyl-CoA synthetase;
KW   immunomodulatory activity; identification; activated T-cell; cytokine;
KW   interluekin; IL; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9838306-A1.
XX
PD   03-SEP-1998.
XX
PF   27-FEB-1997;   97WO-US003159.
XX
PR   27-FEB-1997;   97WO-US003159.
XX
PA   (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI   Dolganov G;
XX
DR   WPI; 1998-481207/41.
XX
PT   Novel human immunomodulatory poly:peptide(s) - have homology to the yeast
PT   RAD50 or Drosophila Septin-2 proteins.
XX
PS   Example 1; Page 27; 155pp; English.
XX
CC   PCR primers AAV59945-46 were used to identify cDNA encoding human
CC   cytokine interleukin (IL) from different cDNA pools, to provide an
CC   estimate of the degree to which the cytokine transcript is present. mRNA
CC   was isolated from activated T-cells, and converted to cDNA prior to
CC   amplification. The specification describes sequences encoding human
CC   analogues of the yeast RAD50, the Drosophila Septin-2 and Acyl-CoA
CC   synthetase. The proteins have immunomodulatory activity. The nucleic
CC   acids and proteins can be used to identify activated T-cells in a sample
CC   population. They can also be used to isolate and identify sequences
CC   encoding other proteins or other compounds having immunomodulatory
CC   activity
XX
SQ   Sequence 21 BP; 4 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2181 GGTGTAATGAACACCGAGTGG 2201
             |||||||||||||||||||||
Db         21 GGTGTAATGAACACCGAGTGG 1


RESULT 63
AAX54017/c
ID   AAX54017 standard; DNA; 21 BP.
XX
AC   AAX54017;
XX
DT   05-JUL-1999  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide fragment.
XX
KW   Antisense oligonucleotide; multiple target; antisense treatment;
KW   impaired respiration; inflammation; lung disease;
KW   pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW   acute asthma; allergy; asthma; impeded respiration;
KW   respiratory distress syndrome; pain; cystic fibrosis;
KW   pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW   chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW   colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW   hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW   prostate cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9913886-A1.
XX
PD   25-MAR-1999.
XX
PF   17-SEP-1998;   98WO-US019419.
XX
PR   17-SEP-1997;   97US-0059160P.
PR   09-JUN-1998;   98US-00093972.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
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```
PI   Nyce JW;
XX
DR   WPI; 1999-229400/19.
XX
PT   New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT   vasoconstriction.
XX
PS   Disclosure; Page 49; 120pp; English.
XX
CC   The specification describes antisense oligonucleotides (AAX52869-X55271)
CC   directed against at least 2 mRNAs selected from target genes, coding and
CC   non-coding regions of RNAs corresponding to target genes, gene initiation
CC   codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC   -end and the juxta-section between coding and non-coding regions and all
CC   segments of RNAs encoding proteins associated with one or more diseases,
CC   conditions or mixtures. The antisense oligonucleotides may be derived
CC   from sequences AAX55272-74. These multiple target oligonucleotides
CC   (specifically AAX55180-271) can be used for the antisense treatment of
CC   diseases and conditions. Typical diseases and conditions are those
CC   associated with impaired respiration and inflammation, including lung
CC   diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC   acute asthma, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC   pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC   disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC   colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC   hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC   well as all types of cancers which may metastasize or have metastasized
CC   to the lungs, including breast and prostate cancer
XX
SQ   Sequence 21 BP; 0 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        522 GCCAAAGGCAAACGCAGAACG 542
              |||||||||||||||||||||
Db         21 GCCAAAGGCAAACGCAGAACG 1


RESULT 64
AAA33461/c
ID   AAA33461 standard; DNA; 21 BP.
XX
AC   AAA33461;
XX
DT   28-JUL-2000  (first entry)
XX
DE   Low adenosine antisense oligonucleotide SEQ ID NO:1150.
XX
KW   Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW   phosphorothioate; impaired respiration; inflammation; allergy;
KW   allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW   antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW   lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW   respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW   pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009525-A2.
XX
PD   24-FEB-2000.
XX
PF   03-AUG-1999;   99WO-US017712.
XX
PR   03-AUG-1998;   98US-0095212P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW;
XX
DR   WPI; 2000-205971/18.
XX
PT   New antisense oligonucleotides useful for treating e.g. pulmonary
PT   vasoconstruction, inflammation, allergies, asthma, hypertension,
PT   bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT   cancers.
XX
PS   Claim 18; Page 408; 1343pp; English.
XX
CC   The present invention describes a new composition comprising an antisense
CC   oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC   nucleic acids involved in bronchoconstriction, allergies, and/or
CC   inflammation. The ON can have antiinflammatory, antiallergic,
CC   antiasthmatic, cytostatic and analgesic activities. The compositions are
CC   useful for the treatment of diseases associated with inflammation,
CC   impaired airways, including lung disease and diseases whose secondary
CC   effects afflict the lungs of a subject. They can be used for treating
CC   e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC   impeded respiration, respiratory distress syndrome, pain, cystic
CC   fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC   pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC   carcinomas, and cancers which may metastasise to the lungs, including
CC   breast and prostate cancer. The reduction of the adenosine content of the
CC   ONs reduces side effects. The A-containing ONs break down with the
CC   release of deoxyadenosine which activates adenosine receptors causing
CC   bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC   nucleotide sequences given in the sequence listing from the present
CC   invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC   sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC   from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC   AAA33992) are specifically claimed ONs from the present invention. N.B.
CC   Sequences given in the disclosure of the present invention do not match
CC   up with their corresponding SEQ ID NO: sequences given in the sequence
CC   listing
XX
SQ   Sequence 21 BP; 0 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        522 GCCAAAGGCAAACGCAGAACG 542
              |||||||||||||||||||||
Db         21 GCCAAAGGCAAACGCAGAACG 1


RESULT 65
AAF19583/c
ID   AAF19583 standard; DNA; 21 BP.
XX
AC   AAF19583;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human IL5 polynucleotide fragment #1150.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
```

XX
PF 24-MAR-2000; 2000WO-US008020.
XX
PR 06-APR-1999; 99US-0127958P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
PA (NYCE/) NYCE J W.
XX
PI Nyce JW;
XX
DR WPI; 2000-679539/66.
XX
PT Low adenosine (A) content antisense oligonucleotides which do not trigger
PT adenosine receptors during metabolism, useful e.g. for treating cancers
PT and respiratory obstructions.
XX
PS Claim 14; Page 208; 1592pp; English.
XX
CC The present invention describes low adenosine (A) content antisense
CC oligonucleotides and compositions (I) comprising them. In the antisense
CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC The antisense oligonucleotides and (I) can be used to down-regulate the
CC expression and or activity of target polypeptides associated with
CC lung/respiratory disorders and malignancies, such as stimulating and
CC activating peptide factors and transmitters, transcription factors,
CC immunoglobulins and antibodies, antibody receptors, cytokines and
CC chemokines, endogenously produced specific and non-specific enzymes,
CC binding proteins, adhesion molecules and their receptors, cytokine and
CC chemokine receptors, adenosine receptors, bradykinin receptors, central
CC nervous system (CNS) and peripheral nervous and non-nervous system
CC receptors, CNS and peripheral nervous and non-nervous system peptide
CC transmitters, defensins, growth factors, vasoactive peptides and
CC receptors, binding proteins and malignancy associated proteins. The
CC antisense oligonucleotides may be used in this way to treat disorders
CC including respiratory obstruction (especially pulmonary obstruction
CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC surfactant hypoproduction which are associated with a disease or
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 21 BP; 0 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 522 GCCAAAGGCAAACGCAGAACG 542
||||||||||||||||||||
Db 21 GCCAAAGGCAAACGCAGAACG 1

RESULT 66
ABS52409
ID ABS52409 standard; DNA; 21 BP.
XX
AC ABS52409;
XX
DT 15-NOV-2002 (first entry)
XX
DE Mouse Interleukin 5, IL-5, PCR primer #1.
XX
KW Mouse; ss; PCR; primer; interleukin-5; IL-5; diferentiation domain;
KW competitive population normalisation; nucleic acid quantitation.
XX
OS Mus sp.

XX
PN WO200261140-A2.
XX
PD 08-AUG-2002.
XX
PF 31-JAN-2002; 2002WO-US002892.
XX
PR 31-JAN-2001; 2001US-0265695P.
XX
PA (AMBI-) AMBION INC.
XX
PI Brown D, Winkler MM;
XX
DR WPI; 2002-619268/66.
XX
PT Comparing one or more nucleic acid targets within two or more samples
PT useful for the competitive analysis of nucleic acid samples regardless of
PT their abundance, by competitive population (containing the target
PT molecules) normalization.
XX
PS Example 1; Page 63; 106pp; English.
XX
CC The invention relates to comparing one or more nucleic acid targets
CC within two or more samples comprising converting two or more complex
CC nucleic acid samples into a single collection of normalised target
CC molecules that can be used to compare the abundance of each of the
CC targets in the original samples. The method comprises: (a) obtaining at
CC least a first sample and a second sample, each (potentially) having at
CC least a first nucleic acid target; (b) preparing at least a first tagged
CC nucleic acid sample by appending at least a first nucleic acid tag
CC comprising a first differentiation domain to the first nucleic acid
CC target of the first sample (if the first nucleic acid target is present
CC in the first sample); (c) preparing at least a second tagged nucleic acid
CC sample by appending at least a second nucleic acid tag comprising a
CC second differentiation domain to the first nucleic acid target of the
CC second sample (if the first nucleic acid target is present in the second
CC sample); (d) mixing the first tagged nucleic acid sample and the second
CC tagged nucleic acid sample to create a sample mixture; (e) adding a
CC limiting concentration of at least a first target specific primer to the
CC sample mixture; (f) processing the sample mixture by a process comprising
CC at least a first extension reaction to produce a limited concentration of
CC first product nucleic acids complementary to the first nucleic acid
CC target of the first sample, if the first nucleic acid target is present
CC in the first sample, and a limited concentration of second product
CC nucleic acids complementary to the first nucleic acid target of the
CC second sample, if the first nucleic acid target is present in the second
CC sample, where any first product nucleic acids comprise the first
CC differentiation domain and a section of the first nucleic acid target
CC from the first sample and any second product nucleic acids comprise the
CC second differentiation domain and a section of the first nucleic acid
CC target from the second sample; (g) differentiating any first product
CC nucleic acids from any second product nucleic acids; and (h) comparing
CC the amount of the first nucleic acid target in the first sample, if any,
CC to the amount of first nucleic acid target of the second sample, if any.
CC The method is useful for comparing one or more nucleic acid targets
CC within two or more samples, or the competitive analysis nucleic acid
CC samples and is particularly useful for amplifying rare or limiting
CC amounts of nucleic acid sequences for quantitative analysis. The present
CC sequence is a PCR primer used to amplify mouse interleukin cDNA in order
CC to make a membrane bound array for use in an experiment demonstrating the
CC method of the invention
XX
SQ Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 21; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+02;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 672 TCGAACTCTGCTGATAGCCAA 692
||||||||||||||||||||
Db 1 TCGAACTCTGCTGATAGCCAA 21

```
RESULT 67
ABS52421
ID   ABS52421 standard; DNA; 21 BP.
XX
AC   ABS52421;
XX
DT   15-NOV-2002  (first entry)
XX
DE   Primer extension reaction target specific primer 5.
XX
KW   ss; PCR; primer; primer extension; mouse; differentiation domian;
KW   competitive population normalisation; nucleic acid quantitation.
XX
OS   Mus sp.
XX
PN   WO200261140-A2.
XX
PD   08-AUG-2002.
XX
PF   31-JAN-2002; 2002WO-US002892.
XX
PR   31-JAN-2001; 2001US-0265695P.
XX
PA   (AMBI-) AMBION INC.
XX
PI   Brown D,  Winkler MM;
XX
DR   WPI; 2002-619268/66.
XX
PT   Comparing one or more nucleic acid targets within two or more samples
PT   useful for the competitive analysis of nucleic acid samples regardless of
PT   their abundance, by competitive population (containing the target
PT   molecules) normalization.
XX
PS   Example 4; Page 66; 106pp; English.
XX
CC   The invention relates to comparing one or more nucleic acid targets
CC   within two or more samples comprising converting two or more complex
CC   nucleic acid samples into a single collection of normalised target
CC   molecules that can be used to compare the abundance of each of the
CC   targets in the original samples. The method comprises: (a) obtaining at
CC   least a first sample and a second sample, each (potentially) having at
CC   least a first nucleic acid target; (b) preparing at least a first tagged
CC   nucleic acid sample by appending at least a first nucleic acid tag
CC   comprising a first differentiation domain to the first nucleic acid
CC   target of the first sample (if the first nucleic acid target is present
CC   in the first sample); (c) preparing at least a second tagged nucleic acid
CC   sample by appending at least a second nucleic acid tag comprising a
CC   second differentiation domain to the first nucleic acid target of the
CC   second sample (if the first nucleic acid target is present in the second
CC   sample); (d) mixing the first tagged nucleic acid sample and the second
CC   tagged nucleic acid sample to create a sample mixture; (e) adding a
CC   limiting concentration of at least a first target specific primer to the
CC   sample mixture; (f) processing the sample mixture by a process comprising
CC   at least a first extension reaction to produce a limited concentration of
CC   first product nucleic acids complementary to the first nucleic acid
CC   target of the first sample, if the first nucleic acid target is present
CC   in the first sample, and a limited concentration of second product
CC   nucleic acids complementary to the first nucleic acid target of the
CC   second sample, if the first nucleic acid target is present in the second
CC   sample, where any first product nucleic acids comprise the first
CC   differentiation domain and a section of the first nucleic acid target
CC   from the first sample and any second product nucleic acids comprise the
CC   second differentiation domain and a section of the first nucleic acid
CC   target from the second sample; (g) differentiating any first product
CC   nucleic acids from any second product nucleic acids; and (h) comparing
CC   the amount of the first nucleic acid target in the first sample, if any,
CC   to the amount of first nucleic acid target of the second sample, if any.
CC   The method is useful for comparing one or more nucleic acid targets
CC   within two or more samples, or the competitive analysis nucleic acid
CC   samples and is particularly useful for amplifying rare or limiting
CC   amounts of nucleic acid sequences for quantitative analysis. The present
CC   sequence is a target specific PCR primer used in a primer extension
CC   reaction to distinguish mixed populations of tagged sequences
XX
SQ   Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 68
ABS63346
ID   ABS63346 standard; DNA; 21 BP.
XX
AC   ABS63346;
XX
DT   28-OCT-2002  (first entry)
XX
DE   Target specific PCR primer #5.
XX
KW   PCR; primer; nucleic acid amplification; ss;
KW   nucleic acid target detection.
XX
OS   Unidentified.
XX
PN   WO200261145-A2.
XX
PD   08-AUG-2002.
XX
PF   31-JAN-2002; 2002WO-US003169.
XX
PR   31-JAN-2001; 2001US-0265692P.
XX
PA   (AMBI-) AMBION INC.
XX
PI   Winkler MM,  Brown D;
XX
DR   WPI; 2002-619271/66.
XX
PT   Comparing one or more nucleic acid targets within two or more samples by
PT   hybridizing the samples into target fractions then amplification prior to
PT   nucleic acid target quantification.
XX
PS   Example 7; Page 57; 84pp; English.
XX
CC   This invention relates to a novel method for comparing one or more
CC   nucleic acid targets within two or more samples. The method comprises
CC   preparing a sample mixture by obtaining at least a first sample and a
CC   second sample, each potentially with at least a first nucleic acid target
CC   and mixing the first nucleic acid sample and the second nucleic acid
CC   sample to create a sample mixture. The method of the invention is useful
CC   for fractionating nucleic acid samples into target fractions then using
CC   nucleic acids amplification to quantitatively assess the nucleic acid
CC   target within each fraction. This method as compared to prior art methods
CC   facilitates the analysis of more target sequences to determine nucleic
CC   acid profiles of limited tissue samples. The present sequence represents
CC   a PCR primer used in the method of the invention
XX
SQ   Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 69
```

```
ABS63332
ID   ABS63332 standard; DNA; 21 BP.
XX
AC   ABS63332;
XX
DT   28-OCT-2002  (first entry)
XX
DE   Interleukin-5 PCR primer #1.
XX
KW   PCR; primer; nucleic acid amplification; ss; interleukin-5;
KW   nucleic acid target detection.
XX
OS   Unidentified.
XX
PN   WO200261145-A2.
XX
PD   08-AUG-2002.
XX
PF   31-JAN-2002; 2002WO-US003169.
XX
PR   31-JAN-2001; 2001US-0265692P.
XX
PA   (AMBI-) AMBION INC.
XX
PI   Winkler MM,  Brown D;
XX
DR   WPI; 2002-619271/66.
XX
PT   Comparing one or more nucleic acid targets within two or more samples by
PT   hybridizing the samples into target fractions then amplification prior to
PT   nucleic acid target quantification.
XX
PS   Example 1; Page 53; 84pp; English.
XX
CC   This invention relates to a novel method for comparing one or more
CC   nucleic acid targets within two or more samples. The method comprises
CC   preparing a sample mixture by obtaining at least a first sample and a
CC   second sample, each potentially with at least a first nucleic acid target
CC   and mixing the first nucleic acid sample and the second nucleic acid
CC   sample to create a sample mixture. The method of the invention is useful
CC   for fractionating nucleic acid samples into target fractions then using
CC   nucleic acids amplification to quantitatively assess the nucleic acid
CC   target within each fraction. This method as compared to prior art methods
CC   facilitates the analysis of more target sequences to determine nucleic
CC   acid profiles of limited tissue samples. The present sequence represents
CC   a PCR primer used in the method of the invention
XX
SQ   Sequence 21 BP; 6 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        672 TCGAACTCTGCTGATAGCCAA 692
              |||||||||||||||||||||
Db          1 TCGAACTCTGCTGATAGCCAA 21


RESULT 70
ACF04470/c
ID   ACF04470 standard; DNA; 21 BP.
XX
AC   ACF04470;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Real time PCR targeting IL-5 PCR primer R153.
XX
KW   Nucleic acid level determination; PCR; primer; probe; DNA quantification;
KW   gene therapy; immunosuppressive; anti-HIV; antiarthritic;
KW   neuroprotective; cytostatic; antiallergic; ss.
XX
OS   Unidentified.
XX
PN   WO2003060119-A2.
XX
PD   24-JUL-2003.
XX
PF   20-JAN-2003; 2003WO-EP000493.
XX
PR   18-JAN-2002; 2002EP-00447009.
XX
PA   (ULBR ) UNIV LIBRE BRUXELLES.
XX
PI   Stordeur P,  Goldman M;
XX
DR   WPI; 2003-598531/56.
XX
PT   Quantifying in vivo RNA from a biological sample for producing a
PT   medicament for treating immune related disease by determining in vivo
PT   levels of transcripts using nucleic acid/reverse transcription-PCR
PT   reagent mix in an automated setup.
XX
PS   Disclosure; Page 42; 83pp; English.
XX
CC   The present invention relates to a method of quantifying in vivo RNA from
CC   a biological sample. This involves collecting the biological sample in a
CC   tube comprising a compound inhibiting RNA degradation and/or gene
CC   induction, forming a precipitate comprising nucleic acids, separating the
CC   precipitate from the supernatant, dissolving the precipitate using a
CC   buffer, forming a suspension, isolating nucleic acids from the suspension
CC   using an automated device, dispersing or distributing a reagent mix for
CC   reverse transcription (RT)-PCR using an automated device, dispersing or
CC   distributing the nucleic acids isolated within the dispersed reagent mix
CC   using an automated device and determining the in vivo levels of
CC   transcripts using the nucleic acid and RT-PCR reagent mix of the previous
CC   step in an automated setup. The method is useful for monitoring or
CC   detecting changes in in vivo nucleic acids levels in a biological agent
CC   present, such as eukaryotic or prokaryotic cells, viruses or phages in a
CC   biological sample or for producing a medicament for treating immune
CC   related disease, e.g., autoimmunity, rheumatoid arthritis, multiple
CC   sclerosis, cancer, immunodeficiencies such as AIDS, allergy, graft
CC   rejection or Graft versus Host Disease. The present sequence is a PCR
CC   primer/probe used in the exemplification of the invention
XX
SQ   Sequence 21 BP; 4 A; 6 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        641 TGAAAGAGACCTTGGCACTGC 661
              |||||||||||||||||||||
Db         21 TGAAAGAGACCTTGGCACTGC 1


RESULT 71
ABZ95277/c
ID   ABZ95277 standard; DNA; 21 BP.
XX
AC   ABZ95277;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Human IL-5 antisense fragment no.1141.
XX
KW   Human; antisense; lung dysfunction; nasal airway dysfunction;
KW   antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW   antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW   antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW   adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW   lung inflammation; respiratory disease; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285308-A2.
```

```
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013135.
XX
PR   24-APR-2001; 2001US-0286137P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-229219/22.
XX
PT   Pharmaceutical composition for treating ailments associated with impaired
PT   respiration, has oligo(s) antisense to specific gene(s) or its
PT   corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT   ubiquinone.
XX
PS   Disclosure; SEQ ID NO 10519; 872pp; English.
XX
CC   The invention relates to a novel pharmaceutical composition, which has a
CC   first active agent comprising an oligonucleotide antisense to the
CC   initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC   5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC   junctions of genes encoding a polypeptide associated with lung and/or
CC   nasal airway dysfunction and a second active agent comprising an
CC   antiinflammatory steroid and ubiquinone. A composition of the invention
CC   has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC   immunosuppressive, and cytostatic activity. The composition may have a
CC   use in antisense gene therapy. The composition is useful for treating or
CC   preventing a respiratory, lung or malignant disease or condition, also
CC   for enhancing the prophylactic or therapeutic respiratory effect of an
CC   antiinflammatory steroid in a subject, for reducing or depleting levels
CC   of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC   receptor, producing bronchodilation, increasing levels of ubiquinone or
CC   lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC   lung inflammation, lung allergies, or a respiratory disease or condition.
CC   Note: The sequence data for this patent is not represented in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 21 BP; 0 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        522 GCCAAAGGCAAACGCAGAACG 542
              |||||||||||||||||||||
Db         21 GCCAAAGGCAAACGCAGAACG 1


RESULT 72
ABD19251/c
ID   ABD19251 standard; DNA; 21 BP.
XX
AC   ABD19251;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human IL5 DNA fragment 1141.
XX
KW   Human; antisense; bronchoconstriction; allergy; hyposecretion; pain;
KW   respiratory tract inflammation; adenosine sensitivity; lung; cancer;
KW   surfactant depletion; antiallergic; antiinflammatory; antiasthmatic;
KW   analgesic; hypotensive; immunosuppressive; cytostatic; cystic fibrosis;
KW   beta-adrenergic agonist; respiratory disease; pulmonary vasoconstriction;
KW   respiratory distress syndrome; allergic rhinitis; pulmonary hypertension;
KW   emphysema; chronic obstructive pulmonary disease; cancer; bronchitis;
KW   pulmonary transplantation rejection; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285309-A2.
XX
PD   31-OCT-2002.
XX
PF   23-APR-2002; 2002WO-US013143.
XX
PR   24-APR-2001; 2001US-0286036P.
XX
PA   (EPIG-) EPIGENESIS PHARM INC.
XX
PI   Nyce JW,  Li Y,  Sandrasagra A,  Katz E,  Pabalan J,  Aguilar D;
PI   Miller S,  Tang L,  Shahabuddin S;
XX
DR   WPI; 2003-093058/08.
XX
PT   Pharmaceutical composition for treating asthma, has antisense
PT   oligonucleotide containing less percentage of adenosine, targeted to
PT   nucleic acids associated with lung airway or lung dysfunction, and
PT   bronchodilating agent.
XX
PS   Claim 15; SEQ ID NO 10519; 763pp; English.
XX
CC   This invention describes a novel composition (a) a first active agent,
CC   comprising oligonucleotides, effective for alleviating
CC   bronchoconstriction, respiratory tract inflammation, allergies and
CC   reducing adenosine sensitivity, levels of adenosine (A) or (A) receptors,
CC   surfactant depletion or hyposecretion, when administered to a mammal. The
CC   oligonucleotides are derived from a gene encoding or regulating
CC   expression of a target polypeptide associated with lung airway or lung
CC   dysfunction or cancer and can be anti-sense to the corresponding mRNA.
CC   The invention also describes a kit, that comprises: (a) a delivery
CC   device, in separate containers, (b) the oligonucleotides, (c)
CC   instructions for adding a carrier and for use of the kit. The composition
CC   of the invention has antiallergic, antiinflammatory, antiasthmatic,
CC   analgesic, hypotensive, immunosuppressive and cytostatic activity, is a
CC   beta-adrenergic agonist. The composition is useful for preventing or
CC   treating a respiratory, lung or malignant disease. The administered
CC   composition comprises oligo and is administered to reduce the production
CC   or availability, or to increase the degradation of the target mRNA or to
CC   reduce the amount of target polypeptide present in the lungs. The
CC   pulmonary obstruction, and/or bronchoconstriction and/or lung
CC   inflammation, allergies and/or surfactant hypoproduction are associated
CC   with a disease or condition such as pulmonary vasoconstriction,
CC   inflammation, allergies, asthma, impeded respiration, respiratory
CC   distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease, pulmonary
CC   transplantation rejection, pulmonary infections, bronchitis or cancer.
CC   The reduced adenosine content of the anti-sense oligos corresponding to
CC   thymidines present in the target RNA serves to prevent the breakdown of
CC   the oligonucleotides into products that free adenosine into the system
CC   e.g., lung, brain, heart, kidney, etc, tissue environment and thereby, to
CC   prevent any unwanted effects due to it
XX
SQ   Sequence 21 BP; 0 A; 6 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.7%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        522 GCCAAAGGCAAACGCAGAACG 542
              |||||||||||||||||||||
Db         21 GCCAAAGGCAAACGCAGAACG 1


RESULT 73
AAT50761/c
ID   AAT50761 standard; cDNA; 20 BP.
XX
AC   AAT50761;
XX
DT   24-SEP-1997  (first entry)
XX
```

```
DE   Ovine IL-5 gene reverse primer.
XX
KW   Cytokine; ovine; sheep; interleukin-5; interleukin-12; IL-5; IL-12;
KW   livestock; cow; stress; transport; vaccine adjuvant; veterinary; cancer;
KW   immunosuppression; allergy; reproductive system; growth; early maturity;
KW   antibody; diagnosis; immunopotentiator; PCR; amplify;
KW   early haematopoietic progenitor cell; cytotoxic cell; thymocyte;
KW   secretion; IgM; IgA; bacterial endotoxin; gamma-interferon; ss.
XX
OS   Synthetic.
XX
PN   WO9700321-A1.
XX
PD   03-JAN-1997.
XX
PF   14-JUN-1996;   96WO-AU000360.
XX
PR   14-JUN-1995;   95AU-00003502.
PR   27-OCT-1995;   95AU-00006244.
XX
PA   (CSIR ) COMMONWEALTH SCI & IND RES ORG.
XX
PI   Seow H,  Wood P;
XX
DR   WPI; 1997-077528/07.
XX
PT   Nucleic acid encoding ovine interleukin-5 or -12 - used as vaccine
PT   adjuvants and to treat or prevent microbial infections in livestock.
XX
PS   Example 1; Page 23; 78pp; English.
XX
CC   The sequences given in AAT50760-69 are primers which were used to amplify
CC   the sequences encoding ovine interleukin-5 (IL-5), and interleukin-12 (IL
CC   -12) 35 kD subunit (partial and full length sequence) and the 40 kD
CC   subunit. Ovine IL-5 or IL-12 are used to treat and/or prevent infections
CC   in livestock (esp. cows and sheep), particularly where the animals are
CC   stressed, e.g. during transport. IL-5 and IL-12 can also be used as
CC   adjuvants in vaccines for veterinary use (partic. weakly immunogenic
CC   subunit or synthetic peptide vaccines). They may also be used to treat
CC   cancer, immunosuppression and allergy, to enhance/suppress the
CC   reproductive system and to promote growth or early maturity. Optionally
CC   interleukin can be delivered from constructs or delivery cells and
CC   antibodies are useful in enzyme immunoassays for rapid diagnosis of
CC   infection. The interleukins are immunopotentiators, especially IL-5
CC   promotes growth of early haematopoietic progenitor cells and generation
CC   of cytotoxic cells from thymocytes, also it stimulates production and
CC   secretion of IgM and IgA (in synergism with bacterial endotoxin). IL-12
CC   induces production of gamma-interferon by, and proliferation of, T and NK
CC   cells and increases the (non-)specific cytolytic lymphocyte response. The
CC   genetic constructs can also be used for in vitro production of IL-5 or -
CC   12
XX
SQ   Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
             ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 74
AAT76226/c
ID   AAT76226 standard; DNA; 20 BP.
XX
AC   AAT76226;
XX
DT   12-SEP-1997  (first entry)
XX
DE   Human IL5 antisense oligonucleotide HUMIL5AS7.
XX
KW   Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW   chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS   Synthetic.
XX
PN   WO9640162-A1.
XX
PD   19-DEC-1996.
XX
PF   06-JUN-1996;   96WO-US009306.
XX
PR   07-JUN-1995;   95US-00474497.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
XX
PI   Nyce JW,  Metzger WJ;
XX
DR   WPI; 1997-051871/05.
XX
PT   Treatment of airway diseases such as asthma - by topically applying
PT   adenosine-free antisense oligo:nucleotide to airway epithelium of
PT   subject.
XX
PS   Claim 5; Page 31; 71pp; English.
XX
CC   A method for treating airway disease in a subject has been produced,
CC   which involves the topical administration of an essentially adenosine
CC   free antisense oligonucleotide (ON) to the airway epithelium of the
CC   subject. The present sequence is an antisense oligonucleotide HUMIL5AS7
CC   specific for the human IL5. The method can be used to treat airway
CC   diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC   disease, bronchitis and other airway diseases characterised by an
CC   inflammatory response. By eliminating adenosine from the antisense ON,
CC   its liberation upon antisense degradation is prevented, thereby
CC   preventing adenosine-induced bronchoconstriction in patients with hyper-
CC   reactive airways
XX
SQ   Sequence 20 BP; 0 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3064 AACAAAAGGACAGAGAGACA 3083
             ||||||||||||||||||||
Db         20 AACAAAAGGACAGAGAGACA 1


RESULT 75
AAX54022/c
ID   AAX54022 standard; DNA; 20 BP.
XX
AC   AAX54022;
XX
DT   05-JUL-1999  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide fragment.
XX
KW   Antisense oligonucleotide; multiple target; antisense treatment;
KW   impaired respiration; inflammation; lung disease;
KW   pulmonary vasoconstriction; inflammation; allergic rhinitis;
KW   acute asthma; allergy; asthma; impeded respiration;
KW   respiratory distress syndrome; pain; cystic fibrosis;
KW   pulmonary hypertension; pulmonary vasoconstriction; emphysema;
KW   chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma;
KW   colon cancer; breast cancer; lung cancer; pancreatic cancer;
KW   hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
KW   prostate cancer; ss.
XX
OS   Synthetic.
XX
PN   WO9913886-A1.
XX
```

PD 25-MAR-1999.
XX
PF 17-SEP-1998; 98WO-US019419.
XX
PR 17-SEP-1997; 97US-0059160P.
PR 09-JUN-1998; 98US-00093972.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 1999-229400/19.
XX
PT New antisense oligonucleotides used in treatment of, e.g. pulmonary
PT vasoconstriction.
XX
PS Disclosure; Page 49; 120pp; English.
XX
CC The specification describes antisense oligonucleotides (AAX52869-X55271)
CC directed against at least 2 mRNAs selected from target genes, coding and
CC non-coding regions of RNAs corresponding to target genes, gene initiation
CC codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
CC -end and the juxta-section between coding and non-coding regions and all
CC segments of RNAs encoding proteins associated with one or more diseases,
CC conditions or mixtures. The antisense oligonucleotides may be derived
CC from sequences AAX55272-74. These multiple target oligonucleotides
CC (specifically AAX55180-271) can be used for the antisense treatment of
CC diseases and conditions. Typical diseases and conditions are those
CC associated with impaired respiration and inflammation, including lung
CC diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
CC acute asthma, allergies, asthma, impeded respiration, respiratory
CC distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
CC pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
CC disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
CC colon cancer, breast cancer, lung cancer, pancreatic cancer,
CC hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, as
CC well as all types of cancers which may metastasize or have metastasized
CC to the lungs, including breast and prostate cancer
XX
SQ Sequence 20 BP; 0 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3064 AACAAAAGGACAGAGAGACA 3083
||||||||||||||||||||
Db 20 AACAAAAGGACAGAGAGACA 1

RESULT 76
AAA33466/c
ID AAA33466 standard; DNA; 20 BP.
XX
AC AAA33466;
XX
DT 28-JUL-2000 (first entry)
XX
DE Low adenosine antisense oligonucleotide SEQ ID NO:1155.
XX
KW Human; adenosine receptor; low adenosine antisense oligonucleotide;
KW phosphorothioate; impaired respiration; inflammation; allergy;
KW allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
KW antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway;
KW lung disease; ischaemic condition; pulmonary vasoconstriction; asthma;
KW respiratory distress syndrome; pain; cystic fibrosis; emphysema;
KW pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
KW cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
XX
OS Homo sapiens.
XX
PN WO200009525-A2.
XX
PD 24-FEB-2000.
XX
PF 03-AUG-1999; 99WO-US017712.
XX
PR 03-AUG-1998; 98US-0095212P.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW;
XX
DR WPI; 2000-205971/18.
XX
PT New antisense oligonucleotides useful for treating e.g. pulmonary
PT vasoconstruction, inflammation, allergies, asthma, hypertension,
PT bronchitis, emphysema, respiratory distress syndrome, ischemia or
PT cancers.
XX
PS Claim 18; Page 409; 1343pp; English.
XX
CC The present invention describes a new composition comprising an antisense
CC oligonucleotide (ON) with low adenosine (up to 15%), which targets
CC nucleic acids involved in bronchoconstriction, allergies, and/or
CC inflammation. The ON can have antiinflammatory, antiallergic,
CC antiasthmatic, cytostatic and analgesic activities. The compositions are
CC useful for the treatment of diseases associated with inflammation,
CC impaired airways, including lung disease and diseases whose secondary
CC effects afflict the lungs of a subject. They can be used for treating
CC e.g. ischaemic conditions, pulmonary vasoconstriction, allergies, asthma,
CC impeded respiration, respiratory distress syndrome, pain, cystic
CC fibrosis, pulmonary hypertension, emphysema, chronic obstructive
CC pulmonary disease (COPD), and cancers such as leukaemias, lymphomas,
CC carcinomas, and cancers which may metastasise to the lungs, including
CC breast and prostate cancer. The reduction of the adenosine content of the
CC ONs reduces side effects. The A-containing ONs break down with the
CC release of deoxyadenosine which activates adenosine receptors causing
CC bronchoconstriction and inflammation. AAA32313 to AAA35312 represent the
CC nucleotide sequences given in the sequence listing from the present
CC invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185
CC sequences are also called SEQ ID NO:1 to 185, but the sequences differ
CC from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to
CC AAA33992) are specifically claimed ONs from the present invention. N.B.
CC Sequences given in the disclosure of the present invention do not match
CC up with their corresponding SEQ ID NO: sequences given in the sequence
CC listing
XX
SQ Sequence 20 BP; 0 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3064 AACAAAAGGACAGAGAGACA 3083
||||||||||||||||||||
Db 20 AACAAAAGGACAGAGAGACA 1

RESULT 77
AAC73702/c
ID AAC73702 standard; DNA; 20 BP.
XX
AC AAC73702;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human IL-5 antisense oligonucleotide ISIS #16087.
XX
KW Human; interleukin-5; IL-5; signal transduction;
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW inflammation; cancer; ss.
XX
OS Homo sapiens.
OS Synthetic.

```
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
             ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1


RESULT 78
AAC73705/c
ID   AAC73705 standard; DNA; 20 BP.
XX
AC   AAC73705;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16090.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 2 A; 5 C; 3 G; 10 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2135 AAGACGGAGAGTAAACCAAT 2154
             ||||||||||||||||||||
Db         20 AAGACGGAGAGTAAACCAAT 1


RESULT 79
AAC73708/c
ID   AAC73708 standard; DNA; 20 BP.
XX
AC   AAC73708;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16093.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
```

```
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2269 TGCAGTGAGAATGAGGGCCA 2288
              ||||||||||||||||||||
Db         20 TGCAGTGAGAATGAGGGCCA 1


RESULT 80
AAC73686/c
ID   AAC73686 standard; DNA; 20 BP.
XX
AC   AAC73686;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16071.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1


RESULT 81
AAC73714/c
ID   AAC73714 standard; DNA; 20 BP.
XX
AC   AAC73714;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16099.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 82
AAC73691/c
ID   AAC73691 standard; DNA; 20 BP.
XX
AC   AAC73691;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16076.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
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```
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        895 TCCTCTCCAGACTCTGAGGA 914
              ||||||||||||||||||||
Db         20 TCCTCTCCAGACTCTGAGGA 1


RESULT 83
AAC73697/c
ID   AAC73697 standard; DNA; 20 BP.
XX
AC   AAC73697;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16082.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 8 A; 7 C; 2 G; 3 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1627 TGGTGGTTTGTTGCCTAGAA 1646
              ||||||||||||||||||||
Db         20 TGGTGGTTTGTTGCCTAGAA 1


RESULT 84
AAC73711/c
ID   AAC73711 standard; DNA; 20 BP.
XX
AC   AAC73711;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16096.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        509 ATGCACTTTCTTTGCCAAAG 528
              ||||||||||||||||||||
Db         20 ATGCACTTTCTTTGCCAAAG 1
```

```
RESULT 85
AAC73713/c
ID   AAC73713 standard; DNA; 20 BP.
XX
AC   AAC73713;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16098.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1


RESULT 86
AAC73718/c
ID   AAC73718 standard; DNA; 20 BP.
XX
AC   AAC73718;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16103.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 87
AAC73699/c
ID   AAC73699 standard; DNA; 20 BP.
XX
AC   AAC73699;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16084.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
```

```
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Claim 4; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1884 ACCAACTGTGCACTGAAGAA 1903
              ||||||||||||||||||||
Db         20 ACCAACTGTGCACTGAAGAA 1


RESULT 88
AAC73710/c
ID   AAC73710 standard; DNA; 20 BP.
XX
AC   AAC73710;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16095.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2416 AAGTATTTTCCTCCAGGCAA 2435
              ||||||||||||||||||||
Db         20 AAGTATTTTCCTCCAGGCAA 1


RESULT 89
AAC73712/c
ID   AAC73712 standard; DNA; 20 BP.
XX
AC   AAC73712;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16097.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 90
AAC73715/c
ID   AAC73715 standard; DNA; 20 BP.
XX
AC   AAC73715;
XX
```

```
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16100.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 5 A; 2 C; 1 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 91
AAC73690/c
ID   AAC73690 standard; DNA; 20 BP.
XX
AC   AAC73690;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16075.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 7 A; 7 C; 2 G; 4 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        857 TGAATGCTGGTGTGCTGTAA 876
              ||||||||||||||||||||
Db         20 TGAATGCTGGTGTGCTGTAA 1


RESULT 92
AAC73693/c
ID   AAC73693 standard; DNA; 20 BP.
XX
AC   AAC73693;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16078.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
```

```
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 5 A; 2 C; 1 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        928 ACATAAAAATGTAAGTTAAA 947
              ||||||||||||||||||||
Db         20 ACATAAAAATGTAAGTTAAA 1


RESULT 93
AAC73694/c
ID   AAC73694 standard; DNA; 20 BP.
XX
AC   AAC73694;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16079.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 5 A; 5 C; 1 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        964 TGATGGCATGAATAAGTAAA 983
              ||||||||||||||||||||
Db         20 TGATGGCATGAATAAGTAAA 1


RESULT 94
AAC73703/c
ID   AAC73703 standard; DNA; 20 BP.
XX
AC   AAC73703;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16088.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 8 A; 5 C; 4 G; 3 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2051 GCTGTGCCTATTTCTATGGA 2070
              ||||||||||||||||||||
Db         20 GCTGTGCCTATTTCTATGGA 1


RESULT 95
AAC73687/c
ID   AAC73687 standard; DNA; 20 BP.
XX
AC   AAC73687;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16072.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
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```
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 0 A; 5 C; 6 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        523 CCAAAGGCAAACGCAGAACG 542
              ||||||||||||||||||||
Db         20 CCAAAGGCAAACGCAGAACG 1


RESULT 96
AAC73700/c
ID   AAC73700 standard; DNA; 20 BP.
XX
AC   AAC73700;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16085.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Claim 4; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1932 GTCAAACTGTGCAAGGGGGT 1951
              ||||||||||||||||||||
Db         20 GTCAAACTGTGCAAGGGGGT 1


RESULT 97
AAC73701/c
ID   AAC73701 standard; DNA; 20 BP.
XX
AC   AAC73701;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16086.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
```

```
XX
SQ   Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1988 AAGAAATACATTGACGGCCA 2007
              ||||||||||||||||||||
Db         20 AAGAAATACATTGACGGCCA 1


RESULT 98
AAC73696/c
ID   AAC73696 standard; DNA; 20 BP.
XX
AC   AAC73696;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16081.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 7 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1407 TGCCTGGTCATATTAAAATG 1426
              ||||||||||||||||||||
Db         20 TGCCTGGTCATATTAAAATG 1


RESULT 99
AAC73716/c
ID   AAC73716 standard; DNA; 20 BP.
XX
AC   AAC73716;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16101.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1873 CCTCATTTAGCACCAACTGT 1892
              ||||||||||||||||||||
Db         20 CCTCATTTAGCACCAACTGT 1


RESULT 100
AAC73698/c
ID   AAC73698 standard; DNA; 20 BP.
XX
AC   AAC73698;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16083.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
```

PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Karras JG, Mckay R;
XX
DR WPI; 2000-594648/56.
XX
PT Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT syndrome in humans modulates interleukin-5 signal transduction.
XX
PS Example 20; Page 63; 156pp; English.
XX
CC The present sequence is an oligonucleotide used for antisense modulation
CC of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC The antisense oligonucleotides may be used for the treatment of diseases
CC associated with IL-5 signal transduction, IL-5 expression or IL-5
CC receptor-alpha expression. Such diseases include asthma and eosinophilic
CC syndrome. The oligonucleotides are also useful for research uses and to
CC prevent or delay infection, inflammation or tumour formation
XX
SQ Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1873 CCTCATTTAGCACCAACTGT 1892
||||||||||||||||||||
Db 20 CCTCATTTAGCACCAACTGT 1

RESULT 101
AAC73692/c
ID AAC73692 standard; DNA; 20 BP.
XX
AC AAC73692;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human IL-5 antisense oligonucleotide ISIS #16077.
XX
KW Human; interleukin-5; IL-5; signal transduction;
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW inflammation; cancer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200058512-A1.
XX
PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Karras JG, Mckay R;
XX
DR WPI; 2000-594648/56.
XX
PT Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT syndrome in humans modulates interleukin-5 signal transduction.
XX
PS Example 20; Page 63; 156pp; English.
XX
CC The present sequence is an oligonucleotide used for antisense modulation
CC of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC The antisense oligonucleotides may be used for the treatment of diseases
CC associated with IL-5 signal transduction, IL-5 expression or IL-5
CC receptor-alpha expression. Such diseases include asthma and eosinophilic
CC syndrome. The oligonucleotides are also useful for research uses and to
CC prevent or delay infection, inflammation or tumour formation
XX
SQ Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 905 ACTCTGAGGATTCCTGTTCC 924
||||||||||||||||||||
Db 20 ACTCTGAGGATTCCTGTTCC 1

RESULT 102
AAC73717/c
ID AAC73717 standard; DNA; 20 BP.
XX
AC AAC73717;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human IL-5 antisense oligonucleotide ISIS #16102.
XX
KW Human; interleukin-5; IL-5; signal transduction;
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW inflammation; cancer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200058512-A1.
XX
PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Karras JG, Mckay R;
XX
DR WPI; 2000-594648/56.
XX
PT Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT syndrome in humans modulates interleukin-5 signal transduction.
XX
PS Example 20; Page 64; 156pp; English.
XX
CC The present sequence is an oligonucleotide used for antisense modulation
CC of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC The antisense oligonucleotides may be used for the treatment of diseases
CC associated with IL-5 signal transduction, IL-5 expression or IL-5
CC receptor-alpha expression. Such diseases include asthma and eosinophilic
CC syndrome. The oligonucleotides are also useful for research uses and to
CC prevent or delay infection, inflammation or tumour formation
XX
SQ Sequence 20 BP; 3 A; 4 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy       2002 CGGCCAAAAAGTAAGTTACA 2021
              ||||||||||||||||||||
Db         20 CGGCCAAAAAGTAAGTTACA 1
```

RESULT 103
AAC73689/c
ID AAC73689 standard; DNA; 20 BP.
XX
AC AAC73689;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human IL-5 antisense oligonucleotide ISIS #16074.
XX
KW Human; interleukin-5; IL-5; signal transduction;
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW inflammation; cancer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200058512-A1.
XX
PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Karras JG, Mckay R;
XX
DR WPI; 2000-594648/56.
XX
PT Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT syndrome in humans modulates interleukin-5 signal transduction.
XX
PS Example 20; Page 63; 156pp; English.
XX
CC The present sequence is an oligonucleotide used for antisense modulation
CC of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC The antisense oligonucleotides may be used for the treatment of diseases
CC associated with IL-5 signal transduction, IL-5 expression or IL-5
CC receptor-alpha expression. Such diseases include asthma and eosinophilic
CC syndrome. The oligonucleotides are also useful for research uses and to
CC prevent or delay infection, inflammation or tumour formation
XX
SQ Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

```
  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        688 GCCAATGAGGTAATTTTCTT 707
              ||||||||||||||||||||
Db         20 GCCAATGAGGTAATTTTCTT 1
```

RESULT 104
AAC73707/c
ID AAC73707 standard; DNA; 20 BP.
XX
AC AAC73707;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human IL-5 antisense oligonucleotide ISIS #16092.
XX
KW Human; interleukin-5; IL-5; signal transduction;
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW inflammation; cancer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200058512-A1.
XX
PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Karras JG, Mckay R;
XX
DR WPI; 2000-594648/56.
XX
PT Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT syndrome in humans modulates interleukin-5 signal transduction.
XX
PS Example 20; Page 64; 156pp; English.
XX
CC The present sequence is an oligonucleotide used for antisense modulation
CC of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC The antisense oligonucleotides may be used for the treatment of diseases
CC associated with IL-5 signal transduction, IL-5 expression or IL-5
CC receptor-alpha expression. Such diseases include asthma and eosinophilic
CC syndrome. The oligonucleotides are also useful for research uses and to
CC prevent or delay infection, inflammation or tumour formation
XX
SQ Sequence 20 BP; 4 A; 8 C; 0 G; 8 T; 0 U; 0 Other;

```
  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2241 AAGATTTTGGAGGAGAAGGA 2260
              ||||||||||||||||||||
Db         20 AAGATTTTGGAGGAGAAGGA 1
```

RESULT 105
AAC73709/c
ID AAC73709 standard; DNA; 20 BP.
XX
AC AAC73709;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human IL-5 antisense oligonucleotide ISIS #16094.
XX
KW Human; interleukin-5; IL-5; signal transduction;
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW inflammation; cancer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200058512-A1.
XX
PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.
XX
PA (ISIS-) ISIS PHARM INC.

```
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Claim 4; Page 64; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2352 CATACTGACACTTTGCCAGA 2371
             ||||||||||||||||||||
Db         20 CATACTGACACTTTGCCAGA 1


RESULT 106
AAC73706/c
ID   AAC73706 standard; DNA; 20 BP.
XX
AC   AAC73706;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16091.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2186 AATGAACACCGAGTGGATAA 2205
             ||||||||||||||||||||
Db         20 AATGAACACCGAGTGGATAA 1


RESULT 107
AAC73695/c
ID   AAC73695 standard; DNA; 20 BP.
XX
AC   AAC73695;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16080.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1161 TTCCCAAAGAGCATCGTGTC 1180
             ||||||||||||||||||||
Db         20 TTCCCAAAGAGCATCGTGTC 1


RESULT 108
AAC73688/c
```

```
ID   AAC73688 standard; DNA; 20 BP.
XX
AC   AAC73688;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16073.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        540 ACGTTTCAGAGCCATGAGGA 559
              ||||||||||||||||||||
Db         20 ACGTTTCAGAGCCATGAGGA 1


RESULT 109
AAC73704/c
ID   AAC73704 standard; DNA; 20 BP.
XX
AC   AAC73704;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human IL-5 antisense oligonucleotide ISIS #16089.
XX
KW   Human; interleukin-5; IL-5; signal transduction;
KW   antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW   IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW   inflammation; cancer; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200058512-A1.
XX
PD   05-OCT-2000.
XX
PF   17-MAR-2000; 2000WO-US007318.
XX
PR   26-MAR-1999;   99US-00280799.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Dean NM,  Karras JG,  Mckay R;
XX
DR   WPI; 2000-594648/56.
XX
PT   Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT   syndrome in humans modulates interleukin-5 signal transduction.
XX
PS   Example 20; Page 63; 156pp; English.
XX
CC   The present sequence is an oligonucleotide used for antisense modulation
CC   of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC   designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC   The antisense oligonucleotides may be used for the treatment of diseases
CC   associated with IL-5 signal transduction, IL-5 expression or IL-5
CC   receptor-alpha expression. Such diseases include asthma and eosinophilic
CC   syndrome. The oligonucleotides are also useful for research uses and to
CC   prevent or delay infection, inflammation or tumour formation
XX
SQ   Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2108 TTTTTCACAGAAAAAGTGTG 2127
              ||||||||||||||||||||
Db         20 TTTTTCACAGAAAAAGTGTG 1


RESULT 110
AAF19588/c
ID   AAF19588 standard; DNA; 20 BP.
XX
AC   AAF19588;
XX
DT   14-MAR-2001  (first entry)
XX
DE   Human IL5 polynucleotide fragment #1155.
XX
KW   Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
KW   human; airway disorder; bronchoconstriction; lung inflammation;
KW   surfactant depletion; respiratory; bronchodilator; antiinflammatory;
KW   immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
KW   respiratory obstruction; pulmonary obstruction; impeded respiration;
KW   surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
KW   respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
KW   pulmonary hypertension; emphysema; pulmonary transplantation rejection;
KW   chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
KW   cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200062736-A2.
XX
PD   26-OCT-2000.
XX
PF   24-MAR-2000; 2000WO-US008020.
XX
PR   06-APR-1999;   99US-0127958P.
XX
PA   (UYEC-) UNIV EAST CAROLINA.
PA   (NYCE/) NYCE J W.
XX
```

```
PI   Nyce JW;
XX
DR   WPI; 2000-679539/66.
XX
PT   Low adenosine (A) content antisense oligonucleotides which do not trigger
PT   adenosine receptors during metabolism, useful e.g. for treating cancers
PT   and respiratory obstructions.
XX
PS   Claim 14; Page 208; 1592pp; English.
XX
CC   The present invention describes low adenosine (A) content antisense
CC   oligonucleotides and compositions (I) comprising them. In the antisense
CC   oligonucleotides the A is replaced by a 'Universal' or alternative base.
CC   (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
CC   immunosuppressive, antiasthmatic, hypotensive and cytostatic activities.
CC   The antisense oligonucleotides and (I) can be used to down-regulate the
CC   expression and or activity of target polypeptides associated with
CC   lung/respiratory disorders and malignancies, such as stimulating and
CC   activating peptide factors and transmitters, transcription factors,
CC   immunoglobulins and antibodies, antibody receptors, cytokines and
CC   chemokines, endogenously produced specific and non-specific enzymes,
CC   binding proteins, adhesion molecules and their receptors, cytokine and
CC   chemokine receptors, adenosine receptors, bradykinin receptors, central
CC   nervous system (CNS) and peripheral nervous and non-nervous system
CC   receptors, CNS and peripheral nervous and non-nervous system peptide
CC   transmitters, defensins, growth factors, vasoactive peptides and
CC   receptors, binding proteins and malignancy associated proteins. The
CC   antisense oligonucleotides may be used in this way to treat disorders
CC   including respiratory obstruction (especially pulmonary obstruction
CC   and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
CC   surfactant hypoproduction which are associated with a disease or
CC   condition selected from pulmonary vasoconstriction, inflammation,
CC   allergies, asthma, impeded respiration, respiratory distress syndrome
CC   (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC   hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
CC   pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC   and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC   fragments and antisense oligonucleotides used in the exemplification of
CC   the present invention
XX
SQ   Sequence 20 BP; 0 A; 5 C; 3 G; 12 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       3064 AACAAAAGGACAGAGAGACA 3083
             ||||||||||||||||||||
Db         20 AACAAAAGGACAGAGAGACA 1


RESULT 111
ABX04348/c
ID   ABX04348 standard; DNA; 20 BP.
XX
AC   ABX04348;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16079.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
PA   (MANO/) MANOHARAN M.
XX
PI   Dean NM,  Karras JG,  Mckay R,  Manoharan M;
XX
DR   WPI; 2003-039602/03.
XX
PT   Novel antisense compound for treating disease/condition e.g. eosinophilic
PT   syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT   expression or IL-5 signal transduction, modulates IL-5 signal
PT   transduction.
XX
PS   Example 20; Page 19; 77pp; English.
XX
CC   The invention relates to an antisense compound of 8-30 nucleobases in
CC   length, which modulates interleukin (IL)-5 signal transduction. Also
CC   include are a pharmaceutical composition comprising the antisense
CC   oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC   a diagnostic kit for detecting the expression level of the membrane form
CC   versus soluble form of IL-5 receptor a. The antisense compound is useful
CC   for modulating IL-5 signal transduction, modulating expression of
CC   mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC   in cells or tissues, for altering the ratio of the isoforms of mammalian
CC   IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC   having a disease or condition associated with IL-5 signal transduction,
CC   IL-5 expression or IL-5 receptor a expression, where the disease or
CC   condition include eosinophilic syndrome or asthma. An antisense compound
CC   which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC   for treating a mammal having a disease or condition. The present sequence
CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 5 A; 5 C; 1 G; 9 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        964 TGATGGCATGAATAAGTAAA 983
              ||||||||||||||||||||
Db         20 TGATGGCATGAATAAGTAAA 1


RESULT 112
ABX04353/c
ID   ABX04353 standard; DNA; 20 BP.
XX
AC   ABX04353;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16084.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
XX
PA   (DEAN/) DEAN N M.
PA   (KARR/) KARRAS J G.
PA   (MCKA/) MCKAY R.
```

PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Claim 4; Page 19; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in
CC length, which modulates interleukin (IL)-5 signal transduction. Also
CC include are a pharmaceutical composition comprising the antisense
CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC a diagnostic kit for detecting the expression level of the membrane form
CC versus soluble form of IL-5 receptor a. The antisense compound is useful
CC for modulating IL-5 signal transduction, modulating expression of
CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC in cells or tissues, for altering the ratio of the isoforms of mammalian
CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC having a disease or condition associated with IL-5 signal transduction,
CC IL-5 expression or IL-5 receptor a expression, where the disease or
CC condition include eosinophilic syndrome or asthma. An antisense compound
CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC for treating a mammal having a disease or condition. The present sequence
CC is an antisense oligonucleotide targetting human IL5
XX
SQ Sequence 20 BP; 3 A; 4 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1884 ACCAACTGTGCACTGAAGAA 1903
||||||||||||||||||||
Db 20 ACCAACTGTGCACTGAAGAA 1

RESULT 113
ABX04372/c
ID ABX04372 standard; DNA; 20 BP.
XX
AC ABX04372;
XX
DT 13-JAN-2003 (first entry)
XX
DE Human Interleukin 5 antisense oligonucleotide ISIS 16103.
XX
KW Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW immunosuppressant; eosinophilic syndrome; asthma.
XX
OS Homo sapiens.
XX
PN US2002128216-A1.
XX
PD 12-SEP-2002.
XX
PF 07-MAR-2001; 2001US-00800629.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
PA (KARR/) KARRAS J G.
PA (MCKA/) MCKAY R.
PA (MANO/) MANOHARAN M.
XX
PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX
DR WPI; 2003-039602/03.
XX
PT Novel antisense compound for treating disease/condition e.g. eosinophilic
PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
PT expression or IL-5 signal transduction, modulates IL-5 signal
PT transduction.
XX
PS Example 20; Page 19; 77pp; English.
XX
CC The invention relates to an antisense compound of 8-30 nucleobases in
CC length, which modulates interleukin (IL)-5 signal transduction. Also
CC include are a pharmaceutical composition comprising the antisense
CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
CC a diagnostic kit for detecting the expression level of the membrane form
CC versus soluble form of IL-5 receptor a. The antisense compound is useful
CC for modulating IL-5 signal transduction, modulating expression of
CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
CC in cells or tissues, for altering the ratio of the isoforms of mammalian
CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
CC having a disease or condition associated with IL-5 signal transduction,
CC IL-5 expression or IL-5 receptor a expression, where the disease or
CC condition include eosinophilic syndrome or asthma. An antisense compound
CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
CC for treating a mammal having a disease or condition. The present sequence
CC is an antisense oligonucleotide targetting human IL5
XX
SQ Sequence 20 BP; 7 A; 4 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.6%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.1e+02;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2108 TTTTTCACAGAAAAAGTGTG 2127
||||||||||||||||||||
Db 20 TTTTTCACAGAAAAAGTGTG 1

RESULT 114
ABX04344/c
ID ABX04344 standard; DNA; 20 BP.
XX
AC ABX04344;
XX
DT 13-JAN-2003 (first entry)
XX
DE Human Interleukin 5 antisense oligonucleotide ISIS 16075.
XX
KW Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW immunosuppressant; eosinophilic syndrome; asthma.
XX
OS Homo sapiens.
XX
PN US2002128216-A1.
XX
PD 12-SEP-2002.
XX
PF 07-MAR-2001; 2001US-00800629.
XX
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX
PA (DEAN/) DEAN N M.
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CC   The invention relates to an antisense compound of 8-30 nucleobases in
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  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        857 TGAATGCTGGTGTGCTGTAA 876
              ||||||||||||||||||||
Db         20 TGAATGCTGGTGTGCTGTAA 1


RESULT 115
ABX04342/c
ID   ABX04342 standard; DNA; 20 BP.
XX
AC   ABX04342;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16073.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
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CC   is an antisense oligonucleotide targetting human IL5
XX
SQ   Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;

  Query Match             0.6%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.1e+02;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        540 ACGTTTCAGAGCCATGAGGA 559
              ||||||||||||||||||||
Db         20 ACGTTTCAGAGCCATGAGGA 1


RESULT 116
ABX04358/c
ID   ABX04358 standard; DNA; 20 BP.
XX
AC   ABX04358;
XX
DT   13-JAN-2003  (first entry)
XX
DE   Human Interleukin 5 antisense oligonucleotide ISIS 16089.
XX
KW   Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW   immunosuppressant; eosinophilic syndrome; asthma.
XX
OS   Homo sapiens.
XX
PN   US2002128216-A1.
XX
PD   12-SEP-2002.
XX
PF   07-MAR-2001; 2001US-00800629.
XX
PR   26-MAR-1999;   99US-00280799.
PR   17-MAR-2000; 2000WO-US007318.
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